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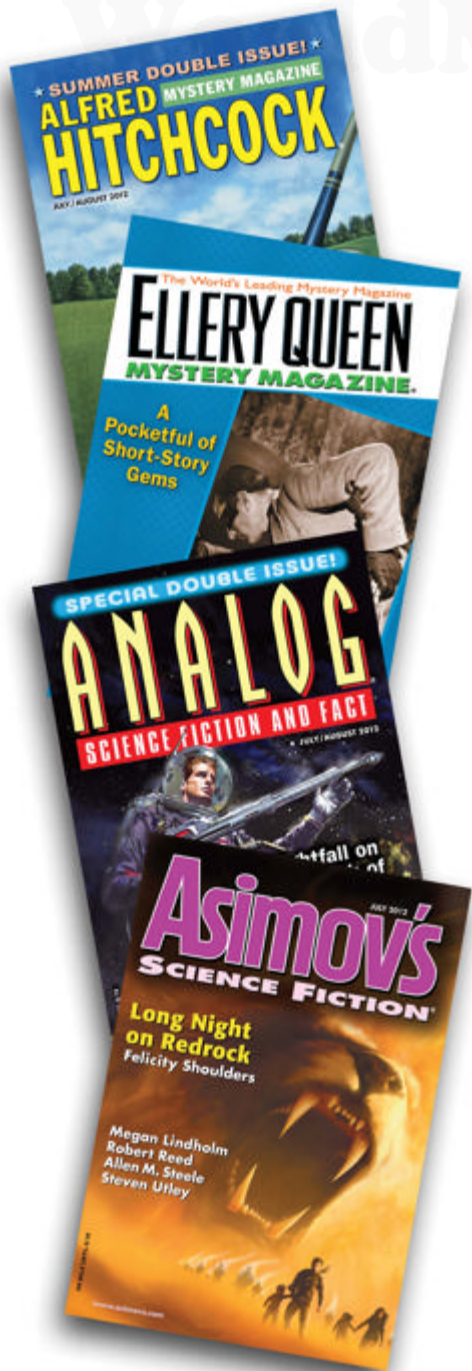
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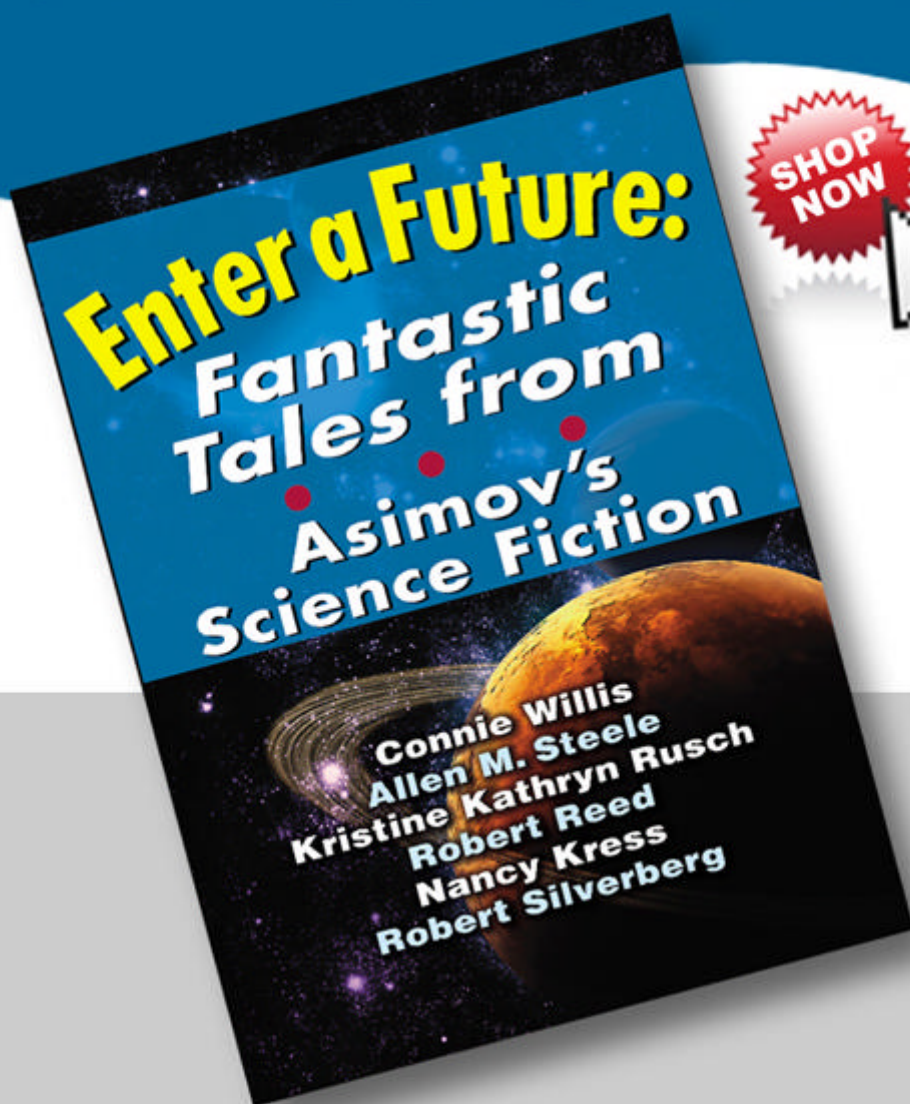
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AUGUST 2013

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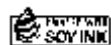
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## THE 2013 DELL MAGAZINES AWARD

**A**lthough it was raining when I landed in Orlando, Florida, for the 2013 International Conference on the Fantastic in the Arts, the weather soon brightened. This was a relief for the Dell Magazines Award for Undergraduate Excellence in Science Fiction and Fantasy Writing finalists who had chosen to spend their spring breaks at the conference. As usual, my co-judge, Rick Wilber, and I had picked our finalists from a huge pool of talented authors. The winner receives an expense-paid trip to Florida and a five hundred dollar first prize that is co-sponsored by Dell Magazines and the International Association for the Fantastic in the Arts and is supported by the School of Mass Communications, University of South Florida. The award is given out each year at the conference.

The finalists are determined by a blind read, but we were thrilled to discover that this year's first prize went to a very familiar face. While Lara Donnelly received the 2013 award for her powerful tale about settlers going "To the Dogs" this was her fifth year to "medal" in the contest. Lara was an honorable mention in 2009, 2010, and 2011, and she was last year's third runner-up. Lara graduated from Wright State University in June 2012, and promptly attended the Clarion Writers Workshop. She was eligible for our award because her entry was written during the spring of her senior year. Lara is now working on an urban fantasy novel and has recently moved to Louisville, Kentucky.

Our first runner-up, Alexandra Gürel of Princeton University, was unable to collect her certificate for "Fantasmas Maravilhosas" in person. Fortunately, Rich Larson, our second runner-up, was able to make the trip all the way from the University of Alberta. Rich was born

in Galmi, Niger, and raised in Maradi until his family moved to Canada when he was ten. A student of French and Spanish, Rich has already sold fiction to several professional markets. We were pleased to encourage his nascent career with our award for "Atrophy."

Our third runner-up, Caitlin Higgins, is a senior studying physics at Cornell University. Although she may eventually study finance or law, Caitlin would like to be an author like her favorite writers, Robin Hobb and Fyodor Dostoyevsky. She received her award for "The Changeling."

Unfortunately, two of our four honorable mentions could not be in attendance—William Tarnell is a student at Vanderbilt University and the author of "Pig and Plume" while Therese Arkenberg studies at Carroll University. Therese had to miss the conference because she was on a student study tour to Ghana, but was excited to place with "The Astrologer's Telling." Luckily, we were able to meet our two other finalists. Alissa Hartenbaum is a third-year student at Georgia Tech studying computational media. Her major includes courses in computer science, computer graphics, and communications. She heard about the Dell Award in a course on creative writing with Kathleen Ann Goonan. We were pleased that that introduction gave us the chance to read her story "The Boy in the Bell Tower." Rachel Lister, a student at High Point University, was already planning to present a paper at the conference on "A City of Front and Back: Duality and the Pursuit of Identity in Neil Gaiman and Dave McKean's *Mirror-Mask*" when she discovered that she would also be attending to collect her award for "The Boundary Wall."

Last year's moving award-winning story by Rebekah Baldridge, "The Superposi-





Photo credit: Francesca Myman, Locus Publications.

Left to right: Rachel Lister, Alissa Hartenbaum, Rick Wilber, Lara Donnelly, Sheila Williams, Caitlin Higgins, and Rich Larson

tion,” is now up on our website at <http://www.asimovs.com/pdfs/Stories/Superposition.pdf>.

Our new award recipients were shown the ropes by three former finalists, Miah Saunders, Rebecca McNulty, and E. Lily Yu. They were also warmly welcomed by conference guests of honor Neil Gaiman and Kij Johnson as well as a number of leading authors. They dined with Kit Reed, Kathleen Ann Goonan, Joe Halderman, and Nick DiChario. In addition, they had the chance to meet James Patrick Kelly, Suzy McKee Charnas, Robert J. Sawyer, Ted Chiang, Stephen R. Donaldson, Andy Duncan, John Kessel, Peter Straub, Delia Sherman, Patricia McKillip, Will Ludwigsen, David Lunde, Steven Erikson, Theodora Goss, James Morrow, Ellen Klages, Sandra McDonald, Christopher Barzak, and many others.

You can visit with previous finalists and current writers at our Facebook site. Search for the **Dell Magazines Award** or go directly to <http://www.facebook.com/pages/manage/#!/pages/Dell-Magazines-Award/177319923776>

We are actively looking for next year’s winner. The deadline for submissions is Monday, January 6, 2014. All full-time undergraduate students at any accredited university or college are eligible. The award is not limited to unpublished authors, but all submissions must be previously unpublished and unsold, and they should be from 1,000 to 10,000 words long.

Before entering the contest, contact Rick Wilber for more information, rules, and manuscript guidelines. He can be reached care of:

Dell Magazines Award  
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[Rwilber@usf.edu](mailto:Rwilber@usf.edu)

Next year, our twentieth award winner will be announced at the 2014 Conference on the Fantastic, in the pages of *Asimov’s Science Fiction* magazine, and on our website. ○



## REREADING SIMAK

Clifford D. Simak, who lived from 1904 to 1988, was one of the giants of editor John W. Campbell's 1939–43 Golden Age, when Campbell's magazine *Astounding Science Fiction* created and defined what we know as modern science fiction. Unlike such of Campbell's writers as Robert A. Heinlein, Isaac Asimov, Theodore Sturgeon, and Jack Williamson, though, Simak's work has not fared particularly well in today's publishing world. Some of it, mainly the novels and stories that appeared in the 1950s in *Astounding's* great rival, *Galaxy*, still can be found on sale. But while Heinlein and Asimov were establishing their names in the Campbell era with their Future History and Foundation stories and novels, Simak wrote mainly short stories and novelettes for Campbell (there was only one novel, 1939's rather creaky *Cosmic Engineers*), and most of those have slipped into oblivion today. The big exception is Simak's *City*, a collection of eight short stories (seven of them published by Campbell between 1944 and 1947, and an eighth that appeared in a pulp magazine called *Fantastic Adventures* in 1951). Simak strung those eight stories together into a sort of chronicle-novel that was published in book form in 1952. A year later it won the International Fantasy Award, the most significant science fiction/fantasy literary award at that time, as the best SF novel of the year, and it has been included in virtually everybody's hundred-greatest-science-fiction-books list ever since.

I first read the *City* stories piecemeal in the 1940s (not in the right order, because I was picking up back issues of *Astounding* second hand), then read the complete book when it appeared as a paperback in 1954, and read it again in

1995 in order to write an introduction to it for a limited-edition reprint. Last year my friend Alvaro Zinos-Amaro, who was taking part in a panel at the World Science Fiction Convention on classic SF of the 1950s, asked me what I thought of it, and, after a lapse of nearly twenty years I read it one more time, to see whether my 1995 opinions had changed at all. And I discovered that they hadn't.

This is what I had to say about Simak in that 1995 essay: "He was a stocky, white-haired Midwestern newspaper editor when I knew him, a man of gentle mien with twinkling eyes and a warm smile and a calm, unpretentious manner. Since he tended to write stories set in the world he knew best, which was that of Wisconsin in the 1920s, it was easy to think of him primarily as a folksy, homespun kind of writer, science fiction's own cracker-barrel philosopher. The ostensible setting of his fiction might be the eightieth century, or a parallel universe, or a strange world of some other galaxy, but somehow, in one way or another, it was always fundamentally Wisconsin in the 1920s there, a world of farmers and dogs and fishing-holes and rocking-chairs on the porch. And so it was all too convenient to categorize Clifford D. Simak's work as mere nostalgic rhapsodizing for a time of lost innocence—simple, gentle fiction by a simple, gentle man. *City*, his most highly regarded novel, is the best evidence I know that this is a vast oversimplification.

"In understanding Simak, it might be useful to consider the career of another American writer with whom he has more than a little in common: Robert Frost. Frost celebrated the vanished world of rural New England in straight-



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forward, unadorned, colloquial verse, telling apparently artless little tales of hired men and mended fences and crows shaking snow out of hemlock trees. Those who wanted to see in Frost's work merely the cheery countrified affirmations of an American bumpkin-bard saw only that and nothing more, and for a long time he was popularly regarded by casual readers as a cheerful spinner of the sort of verse often found on greeting cards; but those who were willing to take a closer look at his poems discovered that behind the Currier-and-Ives surface lay a cold, clear-eyed vision of the fullness of life, realistic and uncompromising even unto the ultimate darkness and bleakness.

"So too with Simak. He was, by my unvarying experience and that of his other colleagues, a genuinely good and kindly man, benevolent and lovable, a thoroughly *nice* person. (Frost, so I understand, was not quite as nice.) And he did, in his fiction, recapitulate again and again his woodsy boyhood world, so different from the one most of us have experienced. . . . Simak never is afraid to express sentiment, but he is no sentimentalist; the country boy learns early that life is real and life is earnest, and that after the rich crops of summer come the inevitable cold blasts of autumn's winds and the silence of the winter snows. Those who go to his fiction—the best of it, anyway—for bland reassurance are likely to come up against disturbing surprises. *City* is a prime case in point."

We see Simak's rural background on display in the first of the *City* stories, "City," from the May 1944 *Astounding*. He said in an autobiographical essay, "I sometimes think that despite the fact my boyhood spanned part of the first and second decades of the twentieth century that I actually lived in what amounted to the tail end of the pioneer days. I swam in the big hole in the creek, I rode toboggans down long hills, I went barefoot in the summer, I got out of bed

**Robert Silverberg**



at four o'clock in the morning during summer vacations to do the morning chores. . . ." In "City" the story, he draws on his memories of that rural world of what is now nearly a century ago. Unfortunately, it's the weakest of the group, relying as it does not on the inwardly felt experiences of his life but on folksy clichés out of some *Saturday Evening Post* story. It was received in most quarters with indifference. The ho-hum opening lines—"Gramp Stevens sat in a lawn chair, feeling the warm, soft sunshine seep into his bones"—offer nothing very compelling. Nor does the extrapolative content of the story sit very well with our knowledge of the overcrowded urban world of modern times. His profound nostalgia for a vanished America had led him, in the opening story, to show how the world of the early nineteenth century could be recreated by way of post-World War II technology—hydroponics, atomics, cheap private planes—leading to a withering away of urban culture by the late twentieth century. That did not happen, nor is it likely to, nor do I think Simak really believed it would. What he shows us is a fantasy: a decentralized United States of the near future in which city life has broken down and the Wisconsin of the 1920s is returning, a world of farmers and dogs and fishing-holes and rocking-chairs on the porch, which even Simak could not have found a very plausible prediction. Making much use of hackneyed phrases like "danged fool" and "that dadburned lawn mower," it attracted very little attention in its own time and provides the book with a slow, stale opening today.

The sequel, two months later, "Huddling Place," carried the premise of its predecessor into new and unsuspected somber territory, as Simak demonstrated that one of the consequences of the dismantling of American urban life would be a crushing sense of agoraphobia. It became clear at once that Simak did not intend to dish up a stale serving of warmed-over nostalgia, but in fact intended to

create a poetic fantasy of an imaginary time that he must never seriously have expected literally to come to pass, a steadily deepening vision of an ever stranger future Earth. He is writing about the loss of community in a world altered by technology, and the strange manifestations of the communal spirit that might emerge once our present mechanistic society has been swept away by the forces we have set in motion. His folksy opening, Gramps and his "dadburned" lawn-mower, widens and widens in the succeeding stories until a breathtaking personal vision of futurity is revealed, informed on every page by the deep compassion that was integral to Clifford D. Simak's character, but innately pessimistic as a view of humanity's future on Earth. *City* is no humanistic hymn to the enduring spirit and worth of the human race. Far from it.

By the time the series reaches its seventh story in 1947, it has traveled an immense distance from its deceptively underplayed and cliché-ridden "by cracky" opening. By gradual steps Simak has gone on in his quiet way to lead us from that opening to one rich and vivid SF concept to another and another, unveiling a startling mélange of robotics, immortality, extraterrestrial exploration, and parallel-world mysticism, all stemming in unforced sequence from his original premise of a decentralization of urban civilization.

"The series was written in a revulsion against mass killing and as a protest against war," Simak declared, many years afterward. "The series was also written as a sort of wish fulfillment. It was the creation of a world I thought there ought to be. It was filled with the gentleness and the kindness and the courage that I thought were needed in the world. And it was nostalgic because I was nostalgic for the old world we had lost and the world that would never be again. . . . I made the dogs and robots the kind of people I would like to live with. And the vital point is this: That they must be dogs or robots, because people



were not that kind of folks.”

And so, surprisingly, it turns out that the literary masterpiece of this warm and good and loving man is basically an excursion into misanthropy—the quiet cry of someone who has lost patience with his own species. We see mankind—focused, for simplicity’s sake, through the single family of the Websters—making a series of decisions, often disastrous ones, that cumulatively obliterate our history, our culture, everything familiar, and even, eventually, our ties to Earth itself, the planet being abandoned by its human population, which migrates to Jupiter (a process initiated in the splendidly eerie middle story, “Desertion”), and left to sentient dogs, to wise old robots, to mutant supermen, and—ultimately, in the bleak finale that Campbell refused to publish—to the ants.

*City* shows how thoroughly we misjudged Simak, mistaking his kindly, gentle manner for a bland, nostalgic,

superficial lament for a lost rural America. Nostalgic he was, yes, and kind and gentle, and surely he did yearn for the simpler Wisconsin of his turn-of-the-century boyhood. But—as was true of that other superficially simple artist, Robert Frost—he had a clear view of the darkness that lay beneath the human surface. He once wrote of *City* as “seeking after a fantasy world that would serve as a counterbalance to the brutality through which the world was passing. . . . It has been said that the tales were an indictment of mankind, and while I may not have thought in such terms at the time, I can see now that they were.”

The world in which we live today was born in the grim years of World War II and the atomic explosions that concluded it. Reading *City* once again, I see it still as one of the finest works of science fiction of its period, a haunting fantasy that is still capable of speaking to us today. ○



## WHAT COUNTS?

*cheer up*

Last time we looked at the economics of a career in SF (Executive Summary: Difficult work, typically low pay). When I turned that column in, Sheila worried that I might be painting too bleak a picture for the beginning writer. If it's such a bad idea, then how come smart people with three names like **Mary Robinette Kowal** <[maryrobinettekowal.com](mailto:maryrobinettekowal.com)> and **James Van Pelt** <[jimvanpelt.livejournal.com](mailto:jimvanpelt.livejournal.com)> and **Kristine Kathryn Rusch** <[kriswrites.com](mailto:kriswrites.com)> write? Because with the right combination of luck and talent and perseverance (and maybe some social media mojo), you can have a career. One of the hallmarks of our genre is that new voices are always welcomed. Check out all the tools we've developed to help newcomers find their way: writing camps for teens like **Alpha** <[alpha.spellcaster.org](http://alpha.spellcaster.org)> and **Shared Worlds** <[wofford.edu/sharedworlds](http://wofford.edu/sharedworlds)>, professional "boot" camps like **Clarion** <[clarion.ucsd.edu](http://clarion.ucsd.edu)>, **Clarion West** <[clarionwest.org](http://clarionwest.org)>, and **Odyssey** <[sff.net/odyssey/workshop.html](http://sff.net/odyssey/workshop.html)>.

These handholds, which those in the writing establishment built to help The Next Generation pull themselves up, point to other reasons for becoming a writer beyond success in the market economy. Non-monetary economies have always existed, but like other aspects of modern culture, the internet is transforming them.

*it's a gift*

In 2007, **Jonathan Lethem** <[jonathanlethem.com](mailto:jonathanlethem.com)> published a remarkable essay in *Harper's* called: "**The Ecstasy of**

**Influence: A Plagiarism**" <[harpers.org/archive/2007/02/the-ecstasy-of-influence](http://harpers.org/archive/2007/02/the-ecstasy-of-influence)>. In it he makes persuasive arguments about copyright and intellectual property issues, the role of influence in an artist's life, and the importance of the gift economy. But Lethem has a trick up his sleeve: his essay is a collage text, the greatest part of which has been lifted from other writers. At the end of the piece Lethem attributes his plagiarisms: "This key to the preceding essay names the source of every line I stole, warped, and cobbled together as I 'wrote.'"

Some might dismiss this as a post-modern stunt, but Lethem's method calls attention to the substance of what he is saying.

Where do writers come from? "*Most artists are brought to their vocation when their own nascent gifts are awakened by the work of a master. That is to say, most artists are converted to art by art itself. Finding one's voice isn't just an emptying and purifying oneself of the words of others but an adopting and embracing of filiations, communities, and discourses.* (Lethem by way of Lewis Hyde's **The Gift** <[lewishyde.com/publications/the-gift](http://lewishyde.com/publications/the-gift)>.)

The works of masters as well as those of lesser practitioners can be considered a kind of cultural commons that we all have a right to, but that writers in particular can and should frequent. Yes, property rights are involved, but there are other considerations as well, because art in general, and SF stories in particular, exist in both a market economy and a gift economy. "*The cardinal difference between gift and commodity exchange is that a gift establishes a feeling-bond between two people, whereas the sale of a*



*commodity leaves no necessary connection. I go into a hardware store, pay the man for a hacksaw blade, and walk out. I may never see him again. The disconnect-ness is, in fact, a virtue of the commodity mode. We don't want to be bothered, and if the clerk always wants to chat about the family, I'll shop elsewhere. I just want a hacksaw blade. But a gift makes a connection."* (Again, Lethem/Hyde.)

I believe that you have experienced this close connection, dear reader, this "feeling-bond." You have your favorites here in *Asimov's* and in the genre at large. Have you ever stopped to consider what makes you prefer the work of one writer over that of another? Might it be that you have received that particular writer's stories not only as entertainments but also as gifts? But wait, since presumably you paid for this magazine, how can a story published here be a potential gift? "*Yet one of the more difficult things to comprehend is that the gift economies—like those that sustain open-source software—coexist so naturally with the market. It is precisely this doubleness in art practices that we must identify, ratify, and enshrine in our lives as participants in culture, either as 'producers' or 'consumers.' Art that matters to us—which moves the heart, or revives the soul, or delights the senses, or offers courage for living, however we choose to describe the experience—is received as a gift is received. Even if we've paid a fee at the door of the museum or concert hall, when we are touched by a work of art something comes to us that has nothing to do with the price.*" (Lethem/Hyde again, but also quoting David Bollier's **Silent Theft** <[bollier.org](http://bollier.org)>.) Recall the grim statistics on writers' incomes from the last installment, and the essential gift-ness of *Asimov's* stories is even more apparent. Ace Hardware makes a profit selling that hacksaw. Not so, most of those word workers listed in your typical table of contents.

And it is resolving the differences between the gift and the market economies that lies at the heart of our copyright

dilemma. Writers and readers need access to the cultural commons because that's where new works—if not new ideas—begin. "*The primary objective of copyright is not to reward the labor of authors but 'to promote the Progress of Science and useful Arts.'* To this end, copyright assures authors the right to their original expression, but encourages others to build freely upon the ideas and information conveyed by a work. This result is neither unfair nor unfortunate." (Lethem quoting Sandra Day O'Connor.) Copyright is not one of Jefferson's unalienable rights like "life, liberty and the pursuit of happiness," but rather a grant from the government that seeks to accommodate the needs of one class of citizens, "producers," with those of a vastly larger class, "consumers." In negotiating an equitable balance, we must remember that stories that arise from our cultural commons must return to that commons, or else it will stagnate. And let's not forget that "*The kernel, the soul—let us go further and say the substance, the bulk, the actual and valuable material of all human utterances—is plagiarism. For substantially all ideas are secondhand, consciously and unconsciously drawn from a million outside sources, and daily used by the garnerer with a pride and satisfaction born of the superstition that he originated them; whereas there is not a rag of originality about them anywhere except the little discoloration they get from his mental and moral caliber and his temperament. . . .*" (Lethem citing a letter Mark Twain wrote to Helen Keller.)

*your rep*

While the gift economy runs parallel to the market economy, the reputation economy crashes into it continually. Mastering social media can't put money directly into a writer's pocket, but if **Neil Gaiman** <[neilgaiman.com](http://neilgaiman.com)> tweets about a new project, 1,798,033 followers get the message. And the reputation economy both giveth and taketh away. When award-winning British crime writer R.J. Ellory (<[rjellory.com](http://rjellory.com)>) was out-



ed for creating false identities to publish reviews on Amazon **praising his own books and slamming those of colleagues** <[guardian.co.uk/books/2012/sep/03/rj-ellory-secret-amazon-reviews](http://guardian.co.uk/books/2012/sep/03/rj-ellory-secret-amazon-reviews)>, he became the poster boy for **sock-puppetry** <[en.wikipedia.org/wiki/Sock\\_puppet\\_%28Internet%29](http://en.wikipedia.org/wiki/Sock_puppet_%28Internet%29)>.

Although online reputation management is a coinage that PR people dreamed up to sell more services, **Businessweek** <[searchengineoptimizationjournal.com/reputation-industry](http://searchengineoptimizationjournal.com/reputation-industry)> has declared it an official "industry." While many of the biggest players in reputation management focus on protecting their clients from attacks, individual entrepreneurs will hit the like button repeatedly—for a fee. In a **New York Times** **expose about reviews-for-hire** <[nytimes.com/2012/08/26/business/book-reviewers-for-hire-meet-a-demand-for-online-raves.html?pagewanted=all&r=0](http://nytimes.com/2012/08/26/business/book-reviewers-for-hire-meet-a-demand-for-online-raves.html?pagewanted=all&r=0)> we learn that twenty glowing reviews posted online will set an author back five hundred dollars. In that article, a data mining expert from the University of Illinois-Chicago estimates that one-third of all consumer reviews on the internet are fake.

Of course, not all efforts to build an online reputation are mendacious. For example, consider writers who give their stories and, indeed, entire novels away. The virtual shelves of Amazon and Barnes & Noble groan beneath the weight of free self-published books. You may recall that we first considered using freebies to build reputation back in 2010 in a **two part column** <[asimovs.com/\\_issue\\_1002/onthenet.shtml](http://asimovs.com/_issue_1002/onthenet.shtml)> and <[asimovs.com/issue\\_1004-05/onthenet.shtml](http://asimovs.com/issue_1004-05/onthenet.shtml)> about Chris Anderson's **Free: The Future of a Radical Price** <[amazon.com/Free-Future-Radical-Chris-Anderson/dp/1401322905](http://amazon.com/Free-Future-Radical-Chris-Anderson/dp/1401322905)>. Then and now, veteran writers grumbled about the practice of giving fiction away to get exposure. As they say, "You can die of exposure." Indeed, some regard this as a betrayal of the writing community. Typical is this **rant by Harlan Ellison** <[\[123\\\_162-33244046/media-site-looks-for-free-content-touts-reputation-economy\]\(http://123\_162-33244046/media-site-looks-for-free-content-touts-reputation-economy\)>: "The problem is that there are so god damn many writers who have no idea that they're supposed to be paid every time they do something, they do it for nothing . . . I get so angry about this because you're undercut by all the amateurs."](http://cbsnews.com/8301-505</a></p>
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It's not only writers giving fiction away for free. Your favorite ezines are filled with great stories that cost nothing to read. These websites live at the intersection of the reputation and gift economies. Consider two prestigious online publications: **Tor.com** <[tor.com](http://tor.com)> and **Strange Horizons** <[strangehorizons.com](http://strangehorizons.com)>. One is a non-profit with an all-volunteer staff funded primarily by donations and arts grants.

The other is an online presence of the genre's largest print publisher. One lives undoubtedly in the gift economy; the other seeks to enhance the reputation of a corporation. In the Lethem essay, we find this assertion, quoting David Foster Wallace's essay "E Unibus Pluram": "This is the reason why even a really beautiful, ingenious, powerful ad (of which there are a lot) can never be any kind of real art: an ad has no status as gift; i.e., it's never really for the person it's directed at."

I'm not sure that's right. When the casual browser stops by either of these sites, does she really care which economy she's in?

*exit*

As a writer who likes to be paid but who has also posted dozens of stories from my backlist on various websites for free, I'm afraid I see both points of view in the on-going free vs. paid controversy. Here's the argument I make to myself: If one of my *'Mov's* stories, published in 2010 or 1997 or whenever, is out of print, what good is it doing consigned to the darkness of my file drawer when it could once again fall under the light of readers' eyes?

Gift, or plug for my "brand"? You be the judge. ○



# STONE TO STONE, BLOOD TO BLOOD

Gwendolyn Clare

**Gwendolyn Clare <[gwendolynclare.com](http://gwendolynclare.com)> has a BA in Ecology, a BS in Geophysics, and is in the process of adding another acronym to her collection. She enjoys practicing martial arts, adopting feral cats, and writing spec fic when she's supposed to be writing her thesis. Her short stories have appeared in *Clarkesworld*, *Daily Science Fiction*, and *Bull Spec*, among others. In her second story for *Asimov's*, two young men living on a planet far from us in time and space take off on a desperate attempt to outrun their destiny.**

**T**he message arrives attached to the leg of a trained bird, some native species with drab greenish-brown plumage. I untie the datachip, impressed with Santiago's ingenuity. Transmissions can be intercepted and decrypted, but who would think twice about a bird landing on a windowsill? No one suspects technology from some bygone century.

"Is that it?" Duyi says behind me, and I turn. He's tense, I can see it in the line of his shoulders, though he does his best to hide it behind a cavalier facade.

I hand the datachip to him. I can't risk reading it myself—my NeuroLogic use is monitored. His, of course, is not.

He lifts his black hair off the back of his neck with one hand and inserts the datachip into the NeuroLogic slot. He's been letting his hair grow out these past few weeks; watching him, I worry reflexively that the regent will disapprove. As if what she thinks still matters. I run a hand over my own black hair, kept military-short according to the regulations of my status, and wonder what I should do with it now.

Duyi sees the gesture and grins. "You worry too much, Brother."

"I don't worry enough," I say. "A dereliction of duty."

His eyes glaze over as he begins mentally sorting through the data. I find some comfort in his bravado, not because I need him to be the strong one, but because covering his fear with derring-do is so perfectly characteristic of him. He is still my Dui.

We'll soon find out exactly how far I can go to keep him that way.

"Symrock," Dui swears, coming out of the reading trance. "Santiago scheduled the raid for tonight. We won't have any time for a practice run."

I shrug. To leave without testing my ability to leave is risky, but to delay would also be risky. We have only five days left before the ceremony—before the regent de-



stroys him—and his escape will only become more difficult as the final hour approaches. Every possible plan has strengths going hand-in-hand with weaknesses.

Duyi fumbles at the back of his neck, removing the datachip with nervous fingers. “Will you . . . will you be okay, defying the regent?”

I look at him steadily. “My Imperative binds me to you, not her. I don’t think it occurred to her that *you* might disobey.”

He flinches when I mention the Imperative. He hates it—mine specifically, but also the general concept of neuro-reprogramming. “Leaving will put me in danger. Can you do that?”

“In a sense, leaving will also protect you. There’s enough vagueness and plasticity to the Imperative. I can work around it.”

His lips pinch tight, as if it pains him to discuss my programming so openly. Under normal circumstances we avoid the topic, but these are not normal circumstances. “You need to be sure you can follow through.”

“I am,” I say. “I can convince myself to do anything for you.”

The regent gave me to Duyi as a present. He was nine and I was ten when we met. Looking back, it was perhaps the only definite show of kindness I have ever witnessed the regent perform. At the time, of course, I had a somewhat different perspective. I was fresh from the NeuroLogic installation lab, still reeling from a thorough memory wipe, and the last thing on my mind was observing the interactions of Duyi and his much older half-sister, Regent Junmei of Moseroth III. What I remember best is how she referred to me as if I weren’t in the room, as if I were a toy instead of a person standing there. I have a few earlier memories, but none so sharp as this one.

Then Duyi stepped close, and the floor seemed to shift under my feet, as if the whole world were forcibly reorienting me. I felt a pressure behind my eyes, and I knew with the sudden, precise certainty of a programmed Imperative that I must keep this boy safe, and more than that, I must make him happy. Duyi stared at me, his dark, almond-shaped eyes wide with curiosity, and I had to hold myself stiff to keep from backing away.

“Hi,” he said, and held his palm out in the high-class gesture of greeting.

My own hand automatically reached out and laid itself atop his, the Imperative commanding my body to respond too fast for me to belay the order. I stared at the back of my knuckles, willing my fingers to twitch, then slowly pulled my hand away. And still I felt that pressure behind my eyes, telling me I wanted nothing more than to protect him, and to please him.

Symrock, how I hated Duyi then.

I crouch down and press my hand to the glass. We’re in the ballroom on the bottom level of the estate, and the windows along the outer wall curve down into the floor, allowing a view of the gardens directly below. I’m not looking for the gardens, of course, but for the navigation lights of skimmers launching from the flight deck.

“Nothing yet,” I say, glancing up.

Against the darkness of the empty ballroom, Duyi—standing in a patch of moonlight—seems to glow, transformed into some unreal apparition. He touches his fingers to his temple, a gesture that means he’s checking his NeuroLogic for the time, but the movement does little to dispel the ghostly illusion.

He says, “Santiago’s late. The raid should be underway already.”

“It may take some time to produce the desired effect.”

Santiago’s plan involves raiding a facility to the southwest of the estate that stores activated symrock—Moseroth III’s major export to other worlds—and thus drawing



security forces away from the estate itself. The estate's guards won't mobilize until it becomes clear the storage facility is seriously jeopardized, which means Santiago and the Freeminers can't bluff the attack. Anything less than a coordinated assault and the reinforcements won't leave their posts at the estate long enough to reinforce—or long enough for Duyi to escape.

"This has to work," Duyi says, the words coming out in a barely audible hiss. There's no need for us to stay quiet in here—the ballroom walls are soundproofed—but I think he doesn't want me to know how scared he is. Scared of the regent, and of what she plans to do to his mind in five days. Something inside me tightens at the desperation in his tone, though my muscles remain relaxed and ready, as always. My body is not in the habit of betraying how I feel.

A dark shape drops into view, silhouetted against the moonlit gardens below. It hovers for a moment, tacking clockwise, and the forward and rear nav lights flick on like stars revealed by a sudden parting of clouds. It darts off a mere second before the next skimmer drops down from the flight deck to take its place. This process repeats half a dozen times until all the reinforcements are deployed.

"Gone," I say, rising to my feet. "It's time."

We'd left our bags by the door, and now retrieve them. I shoulder mine, and my palm itches to reach out for the other one, too, but Duyi is already lifting it. He's become insistent lately about carrying his share—never mind that I'm strong enough for it all. If I try to reach for it, he'll shake me off and say, *it's the principle of the thing, Brother*; so I let him keep the bag.

We take the servants' lift up to the kitchens, cross over the central hub where the estate's antigrav engine resides, then down again on the east side. It's late and most of the staff is asleep, so no one sees us. Nonetheless, as we slip through the light-dimmed hallways, a wave of fear overtakes me. I am not often afraid, but the thought that, after all my assurances, the Imperative might stop me is terrifying. Duyi would hesitate to go on alone, and this would cost him precious minutes, and the guards would catch him.

Duyi's in the lead, his soft-soled shoes shuffling quietly on the bare floor. We both know the way, but he's used to leading.

"Feng!" someone shouts behind us.

I spin around at the sound of my name. It is Hatta, one of the regent's personal guards, and thus one of the few security staff who must remain at the estate no matter how dire the situation becomes with the Freeminers' rebellion. Instinctively, I step away from Duyi, drawing Hatta's attention with me.

"What are you doing here?" he says, his surprise momentarily making him forget decorum.

I pull myself up straight. "Master Duyi wishes to go flying." Given our proximity to the flight deck, any other explanation would be an obvious falsehood.

Stiffly, he replies, "The young master is not permitted to fly without sufficient escort."

"I will escort him, of course."

We both freeze, staring each other down. He narrows his eyes with suspicion, the expression accentuating his epicanthic folds. Hatta knows I know that I do not count as sufficient escort beyond the bounds of the estate. How much else can he deduce? Will he guess the depths of my treason?

We reach for our guns at the same instant, but his Imperative is confused—shooting the master's personal guard feels dangerously akin to attacking the master himself—and it slows him down. I, however, have been coaching myself against the possibility of confronting other guards, so my Imperative feels clear. I shoot him in the shoulder and the knee. He stumbles but refuses to go down, still trying to aim at me with his wounded arm.



"I'm sorry," I say, and shoot him in the head. I'm not, actually—not yet. With the Imperative singing behind my eyes, I am incapable of hesitation or regret. The NeuroLogic technicians didn't just give me the perfect aim of a guard, but the willingness to use it, too. I'll mourn Hatta later, when I come back to myself.

For now, I must do whatever is necessary to get Duyi out.

The estate guards were the ones who taught me the complex etiquette of my station. The technicians hadn't made a child guard on Moseroth III in more than a century, so some subtleties had been lost. In the guards' minds, I think I was more a curiosity to be argued over than I was a child.

In any case, I quickly learned I was allowed to stand by Duyi's chair while he ate, but never to be seen eating with him. On the second evening of my guardhood, he sat down to a formal dinner with the regent and I stood uncomfortably beside him, my too-keen sense of smell reporting all the delights I could not partake of. Lemongrass soup, braised duck, saffron rice, pickled tufa root. My empty stomach churned.

Throughout the meal, Duyi kept stealing glances at me. Finally he said, "Don't you want some food?" I didn't know why this occurred to him—he was accustomed to servants standing by while he ate.

My eyes flicked involuntarily to the other end of the long table, where the regent sat. She seemed absorbed in some document displayed on the table-screen beside her plate, her razor-cut dark hair curtaining her downturned face, but I didn't dare break the rules in her presence. I was expected to say, "No, young master," and so that is what I said.

When they finished the meal, I was excused along with the serving staff to take my dinner in the servants' mess hall. Later that night, Duyi's nursemaid pinged my NeuroLogic to inform me my presence was required. I hurried, but only because it was easier than fighting the Imperative.

The nursemaid opened the door to Duyi's chambers for me as if I were a guest, instead of staff. Duyi seemed to have been waiting impatiently, which made me nervous. None of my etiquette training had prepared me for this.

"It's nearly bedtime, young master. Don't play too long," the nursemaid chided, though I wasn't sure whether the warning was meant more for him or for me.

"Come on," he said, and grabbed my hand as if it were nothing for a lowly guard to touch the regent's brother. I was too shocked by the contact to know what to do. Pulling my hand away could only worsen the situation, so I let him hold it.

One of the sofas in his sitting room had been overturned and stripped of its cushions and pillows, the separate parts rearranged to form a fort. Duyi wriggled through the dark entrance and I ducked in after him.

"I saved this for you," he said, and produced a crumpled dinner napkin. Carefully, he pulled back the corners to reveal a round chocolate truffle, slightly mushed, stolen from that evening's dessert course. "It got a little melty in my pocket. Sorry."

I stared at the offering in his hands, and at his oddly hopeful expression. He didn't know how that single chocolate was worth two months' food to a family like mine. He also didn't know the missing napkin—genuine imported cotton grown from a plant, not synthet in a lab—might cost someone in the laundry room her job.

He was simply trying to be kind.

My heart felt as if it were constricting in my chest. He had everything in the world, except the one thing he needed: someone to share with. I ate the chocolate.

Later, I would chastise myself for it. He was alone, but fantastically wealthy; I was equally alone, and had nothing. I didn't owe him any pity, and I certainly would not let myself be bought with table scraps.

But the next day, it wasn't chocolate. It was playing hide-and-seek in the private



walled gardens below the regent's estate. I remembered the game, though not whom I'd played it with before. It was the only game I remembered how to play, in fact, and as the heir of a regent he had only been taught strategy games. He put away his *weiqi* set and led the way down to the gardens, saying we could try my game today, and his game tomorrow.

I rush up to the flight deck entrance, Duyi hanging back a few paces. The security checkpoint wirelessly recognizes my NeuroLogic ID, and the doors unlock and hiss open for us. I duck my head in to check for guards, but the deck is clear, so I wave Duyi forward.

The flight deck has two long walkways on either side of a wide opening in the floor, through which we can glimpse the moonlit gardens below the estate. The skimmers are lined up between the walkway and the gap, lashed to a section of deck that slants down toward the open air. Many of the skimmer attachments stand empty, thanks to Santiago's plan, though enough skimmers remain for us to choose from.

I select the smallest one, a fast little two-seater that will be hard to spot in the sky, especially at night. Duyi hands his pack to me and climbs into the forward seat.

"You haven't flown this model before," I point out.

"How hard can it be?" he says, running through the pre-flight checks. "Besides, I won't be any use shooting down pursuers."

This is a fair point, and we can't afford the time for hesitation, so I climb into the rear seat. I stuff the packs down into the foot well and swivel the seat to face rearward.

Duyi doesn't need to ask me if I'm ready—we've flown together enough to know each other's patterns and movements. He releases the wheel catch and we roll forward toward the edge. With a sickening lurch, we drop through the opening and freefall for a couple of seconds before the antigrav engine catches us, buoying the skimmer in the air.

I realize my breath has caught in my throat and force myself to exhale. I hold out my hands, expecting them to betray me, but the Imperative doesn't give me so much as a whisper of a command. Duyi is free, and I feel no compulsion to stop him.

As we hover below the estate, Duyi tacks the skimmer around, then he expertly hops it forward onto the symrock roadline leading northeast. Activated symrock repels other symrock with a force analogous to magnetism—though it's actually a product of quantum entanglement—so the symrock in our engine lets us skate above the roadline, flying without wings.

In a well-calibrated skimmer, antigrav feels like nothing, so smooth you only know you're moving when your eyes are open. But now isn't the time to close my eyes and enjoy it; I keep my gaze locked on the estate, the massive structure hovering ostentatiously over its bed of symrock buried beneath the gardens. It occurs to me, for the first time, that a floating fortress is perhaps a bit crass—too large a waste of valuable resources, too flamboyant a show of power. It was our home, and so we accepted its existence as a matter of course, but seeing it for the last time somehow strips away the veneer of familiarity and I can finally view it objectively.

When the estate fades to an indiscernible smudge behind us, I switch to distance vision, and the structure blooms back in magnified detail. Yes, it really looks absurd. What a strange life we led there.

Movement to the southwest, and my ruminations are cut short. A cluster of skimmers converge on the estate, their nav lights glowing like a swarm of fireflies as they hover below the building, rising into the flight deck one at a time.

"Symrock," I curse. "They've returned earlier than Santiago projected." Perhaps I should have taken the time to hide Hatta's body; they'll know something's gone



wrong as soon as they enter the hallway, and it won't take them long after that to figure out what happened. "They'll be after us soon."

"I guess I'll have to take this bird off-road, then," Duyi says over his shoulder.

For his own safety, Duyi is strictly forbidden from off-roading, which means we've only ever tried it once. The Imperative clenches reflexively at the thought of danger, and I must pry its fingers off my psyche before I say, "Yes. I see no alternative."

Duyi slows the skimmer and dips the nose down to lower our altitude until we're skimming a mere meter off the ground. We keep following the unnaturally neat and straight mound of earth where the symrock roadline is buried, even when it passes between the trunks of a copse of trees. I barely recognize the place—the copse is thick with brambles growing right up to the roadline. They're an invasive species, seeded deliberately to deter Duyi from returning.

"Here it is," Duyi says, pulling the skimmer to a standstill. He casts a grin over his shoulder at me. "Don't you remember, Brother?"

Hatta taught him how to fly when he was thirteen. I already knew how, of course—it was one of the aptitudes programmed into my NeuroLogic—but Duyi insisted he wanted to learn for himself. The regent did not entirely approve of him studying such a plebian task, which made everyone nervous about it, but she did not forbid his lessons. Duyi took to skimming as if he'd been a pilot in a past life, and I think he enjoyed it twice as much because it displeased his sister.

On one particular outing, Duyi and I were in the lead, Hatta and another guard following in a second skimmer. We were supposed to be riding the east roadline, but Duyi angled low between the trees and made a sharp turn onto a connector that took us to the northeast line.

I glanced behind us, apprehensive. "I think we've lost the escort, young master."

"Excellent!" Duyi proclaimed, as if this were his intended result.

I recalled how he'd refused to let Hatta ride with us, even though our skimmer was a four-seater. Maybe he *had* planned this from the start. My stomach felt like I had swallowed a black hole.

We raced at top speed over an open field, then decelerated to squeeze into another copse of trees. Somewhere deep in the mottled shade, Duyi slowed the skimmer to a hover, lowered it down to the ground, and cut the antigrav. We dropped the last few centimeters to land with a thunk on the roadline ridge.

"Come on!" Duyi said, climbing out of the skimmer, and I had no choice but to follow him.

We scrambled down the ridge, over a fallen tree trunk, and through the soft knee-high ferns that filled the understory. Duyi led us straight to a rock outcropping, as if he had a map loaded in his NeuroLogic. As I came up behind him, I realized my initial thought was wrong: he wasn't following a map, he was following the feel of a symrock vein, the way a bird feels magnetic north.

Where the vein was exposed, the symrock looked a sort of milky blue color, near translucent, reminding me of a vid Duyi had watched about the arctic ice caves. But the symrock felt warm to the touch, its freshly chipped edges sharp as glass, and of course there was the not-so-small matter of what it could do.

What I knew of symrock I knew only from overhearing Duyi's studies. It was formed from sedimentary deposits of biotic origin. Moseroth had a native species of microorganism that grew symbiotically inside living animals and degraded their corpses when they died, and the resultant deposits could become lithified into symrock. Why the symbionts produced the necessary conditions for macroscopic quantum entanglement was still a matter of scholarly debate. Before that day, symrock had been a theoretical concept like gravity or evolution. Not something real, something I could touch.



Duyi placed his hand against the symrock vein and closed his eyes. I had no idea what to expect—only the Regency family had the correct genetic markers for supporting the symbionts, and I had never seen Duyi use them before. I'd heard that all it took was will: will to control the symbionts inside his body, the symbionts to control the symrock. But the regent was the one who activated all the symrock Mose-roth exported, and she would have been highly displeased if she'd known what Duyi was doing at that moment.

"There," Duyi said after a minute, opening his eyes. "It's activated."

I stared at the symrock dubiously. Nothing seemed to have happened. "It looks the same."

"Well, it isn't," he said, grinning. "Finally, something I can do that they can't just upload to your NeuroLogic—eh, Feng?"

"As you say, young master."

"It'll hold up the antigrav engine now. Let's go!"

"It will *what*?" I said, but Duyi was already racing back to the skimmer, and I had to hurry to catch up with him.

He climbed back in the pilot's seat before I had a chance to stop him—before I'd even determined whether I should be trying to stop him by force. I climbed in beside him, certain that I should, at the very least, stay close, but the Imperative was giving me muddled instructions. On the one hand, I was supposed to protect him at all costs, but on the other, I was supposed to make him happy, not ruin his fun.

I realized, in a sudden moment of clarity, that I had to choose which aspect of my Imperative to obey. That I *could* choose. And if I could work against part of the Imperative in service of fulfilling another part, wasn't it possible I could learn to work against it entirely?

Duyi hopped the skimmer forward onto the symrock vein, and the thought escaped me as if carried away on the breeze. The danger of what we were doing hit me in the chest, squeezing the air from my lungs like a well-placed punch, and my vision tunneled from the strength of the Imperative pounding in my skull. But I gritted my teeth and rode it out, focusing on the sound of Duyi's laugh as he wove the skimmer back and forth, following the vein.

"Now this is an adventure!" Duyi crowed into the wind.

The symrock vein dipped under a mossy hill and vanished from sight, so he had to navigate using only the symbionts' ability to sense it. "Perhaps you should decelerate, young master."

"Relax, I can feel right where we need to go."

*But I can't*, I thought. "You are exposing yourself to unnecessary risk," I said, parroting the older guards.

"And having way more fun than boring old Hatta would ever let us have," he retorted. "We're free! Enjoy it, Brother!"

That was the first time he ever used the honorific, and I assumed it was a jest. He couldn't possibly mean it, of course, because he knew about my programming. He knew I had no choice about how I felt for him—even if I behaved as a brother should, it wasn't real. There could be no bond of friendship between us, and it was my fault, and the thought made me want to weep. To be trapped like this, shadowing but never truly close to him, was infinitely worse than being alone.

Dry-eyed, I swore that day to master the Imperative.

Duyi is flying the skimmer, the wind lifting his hair away from his face. We are two days out from the estate, following a broad vein of symrock northward, and the tension in his body is finally easing away. Even from behind, I can tell he's smiling into the wind—not his showy, manic grin, but the sort of smile that isn't for



anyone else's benefit. Seeing him relax, I feel as if a weight has been lifted from my chest.

Only three days left until the ceremony. The regent will be furious at Duyi's absence. It has been a tradition for almost five centuries that every member of his or her lineage swears fealty to the Regency on his seventeenth birthday—and accepts an Imperative to prove his sincerity. The Regency Imperative is designed to make them loyal to the continued prosperity of the world, and to make them good leaders by some antiquated definition of "good." In reality, it seems to drive them slightly mad: too rational, too calculating, under-influenced by emotion and compassion. But of course, every adult who has the Regency Imperative sees the logic of forcing it on the younger generations.

Duyi swivels his seat a little, so he can talk to me over his shoulder. "There's a reason we never went off-roading after that first time, you know. She threatened to send you down to the NeuroLogic lab for a memory wipe if you ever let me do something so dangerous again."

I hadn't known, but it is the sort of threat that never comes as a surprise when wielded by the regent. A direct and heartless tactic from a direct and heartless woman.

I say, "And here I thought it was because you'd developed a sense of your own mortality. Foolish me." I must admit I find it a little disconcerting that he's not looking where we're going, even though I know he's been steering by feel instead of sight this whole time. At least his hand is steady on the yoke.

He grins. "Are you joking? Off-roading is practically the only thing I can do that you can't. I was *dying* to rub it in some more. But I couldn't risk it." His smile fades. Almost too quiet to hear over the wind, he adds, "It's still a risk."

I shrug. "What would be the point of my remembering anything if she forces the Regency Imperative on you? It's not as if you'd care one way or the other, not after the ceremony."

"Just because I wouldn't—" He gasps in mid-sentence, and I catch a glimpse of the whites of his eyes before he snaps his head around to face the controls. He yanks hard on the yoke, and the flight harness cuts into my shoulders as we decelerate. We're still moving when the antigrav engine sputters and goes quiet, and my stomach lurches with the sensation of freefall.

"Symrock!" Duyi swears, frantically working the stabilizers to keep us upright as we angle toward the ground.

I yank up on the emergency lever, and the rollcage springs closed over the passenger compartment. We hit the ground at too sharp an angle and roll end over end, the leaf-dappled sky and dark earth alternating in dizzying succession. We finally slide to a stop upside down, one corner of the rollcage bent inward so we hang at an odd angle.

"Well," I say. The flight straps are cutting into my shoulders uncomfortably. "So that was the end of the symrock vein, I take it?"

Duyi coughs, the air full of dust kicked up during our inelegant landing. "I may have somewhat over-estimated my own reaction time, I admit."

"Mm, somewhat," I agree.

"I can't get this thing off," he complains, fiddling with his flight harness. There's an audible click, and the harness dumps him unceremoniously on the ground. He squirms in the confines of the rollcage, struggling to reorient into a crouch. "Ow."

"Are you injured?" I brace my feet against the sides of the foot well and put one hand on the ground below my head before releasing my own harness.

"Showoff," he grumbles, as I let myself down carefully. "No, I'm fine. Just bruises."

We have to climb out between the bars of the rollcage. Duyi's shorter and slimmer



than I, and he shimmies through without much trouble, but I have to exhale to squeeze between, and for a moment I fear I'm stuck. Duyi laughs but grabs my hands to pull me free. Then there's nothing to do but retrieve our packs and deal with what's in front of us.

We may be safely away from any roadlines, but traveling by foot is slow, and the regent will be getting impatient for Duyi's retrieval by now. A sobering thought. At least I can consult the topo map stored in my NeuroLogic, now that we're out of range of the estate.

"We're close—half a day's hike to the mining roadline, and we can hitch a ride into town from there."

Duyi scowls. "We'll be late for the rendezvous. Santiago better wait for us."

"He'll wait. He needs you."

Duyi shakes his head, mystified, and I realize he only believes in his own value because I keep insisting upon it. He hasn't actually internalized how pivotal his ability will be for the Freeminers' cause. The Regency bloodline is unique among humans in its ability to support the symbiont infection—Duyi is the only person on the planet, aside from the regent herself, with the proper genetics for hosting symbionts. It makes me furious, sometimes, how thoroughly he's internalized the regent's view of his limited worth. I have to swallow the angry words and remind myself it is not his fault what happened to him.

"He'll wait," I say again, with emphasis. "Let's go."

I came to the estate too late to meet his mother, and Duyi rarely spoke of her. Perhaps it was easier to pretend she had never existed at all. After the old regent's death, his wife was found guilty of treason and sentenced to follow him. No one would actually say that the Regent Junmei hated her father's second wife for being scandalously young and pretty, and for replacing her own mother who had been rendered barren by disease. But everywhere this was implied, in the careful ways the staff would skirt around saying it. So it seemed that Junmei first framed and then executed Duyi's mother out of spite. Duyi himself had been inoculated at birth and the symbiont infection took root, so by law he could not be harmed. Otherwise I suspect she would have taken care of him, too.

Instead the regent found herself in the unforeseen position of needing to take care of him in the non-euphemistic sense. Guardian to a much younger half-brother she'd never wanted, Junmei sought to control him the only way she was capable of: through fear. I do believe, even though she stayed distant and cold with him, she eventually grew to feel something—if not affection, then at least possessiveness, and perhaps a grain of guilt. After all, she could have told the NeuroLogic technicians who programmed my Imperative to make me protect Duyi, and then left it at that. But she didn't.

She also wanted me to fill the emotional void she'd made in his life.

Why, I don't think I'll ever truly know.

We hit the mining roadline about an hour before dark. I almost suggest we keep going on foot, follow the roadline into town, but Duyi is limping slightly, so we settle down to wait. I suspect he has impressive blisters, his feet unused to sustained travel. He shrugs out of his pack and rolls his shoulders, takes a long drink from his water bottle, puts a hand on his shoe as if to remove it.

"Don't," I say. "If your foot swells, you'll never get it back on."

"Brother, if you're worried about us looking presentable for Santiago, I'm afraid that skimmer has flown," he says grumpily, but he leaves the shoe on.

I wasn't worried about the meeting until he said that. I was too preoccupied with



escaping our enemies to worry about our new allies, but now there's time enough to consider both. Our arrangement with the Freeminers is anything but simple—too much being offered on both sides, and the stakes too high—but I thought they were my best chance to get Duyi to safety. I wonder if I'll live to regret that decision.

It's not long before a large flatbed skimmer loaded with miners comes flying down the roadline. We get out of the way, just in case, but it pulls to a stop and hovers down to let us on. One of the miners gives Duyi a hand up, and I'm right behind him, then we're off to meet Santiago.

It turns out there's no need to worry about our appearance. Next to the miners, we look downright clean. They eye our fine-tailored clothing—somewhat abused from the skimmer crash—but there's more curiosity than hostility in their faces. Still, I huddle near Duyi, outwardly relaxed but ready to move at the slightest hint of danger.

The ride takes a half hour or so, and we get off at the town square stop, along with most of the miners. There's some sort of gathering going on, and from snippets of conversation as we walk by, I can tell it has something to do with the Freeminers establishing a more permanent presence in town. Opinions seem mixed on whether or not this is a good thing. I walk close at Duyi's side, in case there's trouble.

Santiago is easy to spot in the crowd—brown hair, worn long and braided, in a sea of close-cropped black-haired Moserothi miners, and a narrow face without any hint of epicanthic fold around the eyes. As he breaks off from a group and heads toward us, I notice he's wearing a gray workman's coverall. He probably chose it to put the locals at ease. It's not every year they harbor a revolutionary.

"Welcome, welcome!" he says, shaking Duyi's hand and then mine. "Friends, we live in exciting times. I think you'll find it quite fulfilling to be here with us, working toward a better future."

Duyi glances at me with a slight raise of an eyebrow. On behalf of both of us, I give Santiago a dry reply: "Yes. Quite."

"So you're skeptical. That's fine," Santiago says genially. He spreads his hands, gesturing while he talks. "Do you know why the Moserothi government is called a regency? On Earth, a regent was a temporary governor who took on the responsibilities of a child monarch until he was old enough to lead. A regency implies the intent to transfer power back to the rightful parties. This was never meant to be a permanent arrangement, and certainly not a hereditary one."

"Yes, I'm sure you're right," Duyi says. I can tell he's distracted.

Santiago looks a bit stunned, as if he is unaccustomed to anyone brushing off his idealistic proclamations. "Well, in any case, I thought we could start with a demonstration—activate some symrock for a few of the Freeminers to see."

"When can we see the doctor?" Duyi demands. Part of the deal with Santiago is that he provides access to a former neurotech who can remove my Imperative.

"There will be plenty of time for that," says Santiago. "She's been sympathetic to the revolution for years—it's not as if she's going to run off."

"We agreed to meet here because the doctor lives here. That was the deal: we *both* go free, and then we help you. I'm not going to touch an ounce of symrock for the Freeminers until Feng sees her."

Santiago scowls, and I feel my muscles tense—he has kept his word so far, but we don't have the luxury of being generous with our trust. He says, "I lost good men and women in that raid just to get you out. I don't think a show of good faith is too much to ask after that."

"No," Duyi says, his hands clenching to fists. "We see the doctor first."

Much to my relief, Santiago gives in—Duyi can become as immovable as stone when he puts his mind to something—and the labor organizer borrows a skimmer



to take us. Santiago's doctor runs a small clinic in what passes for the nice part of town. We let ourselves through the unlocked front door and into a waiting room full of comfortable chairs. A moment later, a woman in a white doctor's uniform comes in and introduces herself as Dr. Anwang. She's thin, with gray streaks in her dark hair and bony, dexterous hands.

I frown. The doctor looks vaguely familiar, but I can't place her. Then an image flashes across my memory, as old and fuzzy as a corrupted datastream: she walked by my medical bay and snuck a glance at me, but when she saw I was conscious she turned away. "You were one of my technicians when I was wiped."

Her eyes widen and she leans away, as if the words were a slap. "Yes, I was."

Duyi steps forward anxiously, hands knotting together. "That doesn't matter, does it?"

"No," I say, too quickly. I take a breath to regain control, then add, "The past is the past."

"I suppose you should know it was you," the doctor tells me. "Why I left, I mean. I left because of what we did to you. When I joined the NeuroLogic Institute, I didn't think . . . they hadn't done a child in a hundred and thirty years. I thought we'd become civilized." She sighs. "If you're ready, we can proceed into the imaging room."

Duyi moves to follow me inside, but the doctor gives him a stern look. "Just the patient, please," she says.

"But . . ." he starts to protest.

"It's okay, Brother." I squeeze his shoulder.

He stares at me, as if searching my face for something, then finally acquiesces. "Fine, I'll wait here."

Anwang closes the door between us, and waves me over to a reclining chair. I lie down, anxious but perfectly capable of hiding it. She lowers some sort of diagnostic contraption over my skull.

"The imager will let me explore a 3-D representation of your neural pathways non-invasively. It will help me determine what kinds of treatment you might be a candidate for."

I don't know how long I lie there. Anwang tries to keep me updated about what she's doing, but it involves a lot of unfamiliar technical jargon, and I don't follow her. When she's finally done, she motions for me to climb out and sit with her in a pair of regular chairs tucked off to one side of the room.

"I'm afraid I don't have good news," she says grimly. "Your Imperative is too deeply interconnected with healthy brain function. As your brain developed, it looks as if you used the implant as a foundation upon which to build real neural pathways. I can't shut down the Imperative without damaging the part of you that's *you*."

"So there's nothing to be done?"

She shrugs helplessly. "If I shut off the Imperative, it could result in frequent seizures as your brain tries to access the dysfunctional pathways. If I surgically remove the whole NeuroLogic, you wouldn't have any physical side effects, but . . . well, more of you would be gone. You were programmed so young, it's hard to know what mental faculties would be affected. You might have to re-learn very basic skills, like walking or reading. In your case, I can't recommend treatment. I'm sorry."

"No, don't be. It's fine." On some level, I think I already knew that the Imperative was too deeply wound inside my mind to ever be pulled apart again. I had to fully accept it in order to master it, and now it's a part of me. "It's just . . . do you think we can tell everyone the operation worked? That you turned the Imperative off?"

Anwang gives me a quizzical look, but says, "If that's what you want."

I nod. "That's what I want." Duyi would take it too hard, to come all this way only to fail. I'm not sure I see it as a failure—this is simply the way the world is—but Duyi would.



I go out into the waiting room, and Duyi stands as I approach. "All done," I say. He won't look me in the eye, and for a moment it baffles me, but then I understand. "Oh. You thought turning it off would change things for us."

"I hoped it would." He finally looks up, his expression pained. "You should be free of me."

"That was never what I wanted. Free of *it*, yes," I say, waving a hand at my skull, "but not free of you. Brothers forever, remember?"

He relaxes, the tension leaching out of his body. He throws his arms around me in a quick embrace, then backs away, embarrassed. "I thought I was going to lose you."

"Never."

When Duyi was ten and a half, he overheard one of the staff referring to me as his "robot toy," and he later demanded I explain to him why. I was torn—on the one hand, I had picked up on the fact that he was not supposed to know about my Imperative, but I also sensed that not knowing made him feel like the butt of a cruel joke. So I told him.

He got very angry with me, as if this were some kind of betrayal. I remember feeling bewildered at how upset he was. After all, it wasn't as if I told him that *he* had an Imperative in his brain. Shouldn't I have been the one who was mad?

He refused to see me for a whole day, until his nursemaid explained I would be punished for displeasing him if he didn't forgive me.

With my visit to the doctor over and a new day dawning, Santiago is eager to give us a tour of his operation. In the back room of a pub, he hands Duyi a small chunk of stolen symrock, and Duyi demonstrates his ability for a half-dozen of Santiago's "lieutenants," as he calls them. Then we follow him to a warehouse where he stocks supplies for the revolution. In the dim lighting between the stacks of crates and boxes, Santiago seems to wax sentimental.

"When I came here as a child, I thought all the Moserothi were rich, since everyone used symrock technology." His parents were political refugees from the Bene-Jaakan system; I know because Duyi looked up his file when we first contacted the Freeminers. "It took me a while to understand that each world has a unique relationship to technology. These, for example."

He lifts the lid on one crate, revealing three long rifles nested snugly next to each other in their hard-foam packaging. I lean in for a closer look—the design appears modern, but unfamiliar.

"Pulse weapons," Santiago says, answering my unasked question. "They're standard issue off-world, but not much use on Moseroth III—too volatile to use around so much symrock. But we can exploit their design defect to turn them into explosive devices."

I glance up at him, surprised, though I suppose I shouldn't be. It's Santiago's ingenuity at work again.

He shows us stashes of stolen symrock, stockpiles of equipment, parts for building old-fashioned vehicles that don't rely on antigrav technology. One end of the warehouse is divided into two stories, and we go up to the second floor, to the single large room that makes up his local headquarters.

One side of the room hosts a bank of communications and monitoring equipment, and an enormous table-screen dominates the center of the room. Santiago activates it with a touch, calling up a map of Moseroth III and an overlay of stratagems in red.

"The forces loyal to the Regency are effective, but small. We can't hope to beat them in a fair fight, but we can overwhelm them—generate enough chaos that they must spread their forces too thin . . ."



We spend the rest of the afternoon in this vein, discussing strategy and meeting revolutionaries. That night, Duyi shakes me awake, one finger pressed to his lips. We slip out of the guest house and past the sentry Santiago posted outside to protect his investment in us. Duyi leads me through the dark streets back to the warehouse, and up to the headquarters.

"Now that we're free, we have to plan our next move," he explains in a hushed voice.

"Aren't we staying with the Freeminers?" The moon is visible through a broad skylight that runs the length of the warehouse, but the glass directly above is clouded with dirt, so I turn on the lights for Duyi's sake.

"For now," he agrees, walking over to the table-screen, "but we should have a back-up plan. In case they prove to be less worthy of our trust than we might hope."

He calls up the map and I join him at the edge of the table, looking down at the web of roadlines and towns laid out before us. "If we're to plan an escape route, it'll depend on whether or not we can get our hands on a skimmer, and if so, which model."

"Or one of Santiago's off-road vehicles, if any of them have been assembled yet," Duyi adds.

"Do you think—" I start to say, but never get the chance to finish the sentence.

We are interrupted by shouts and crashes, and a rain of shattered glass falling on us from above.

Moserothi have a complicated relationship with symrock. It's the foundation of our economic system, the source of our wealth and comfort, the linchpin of our technology. But our dependency on symrock binds us to the Regency government. Symrock gives us power and freedom, and in the same stroke takes it away.

Likewise, the word "symrock" is an all-purpose exclamation: blessing, prayer, and curse all wrapped into two syllables. How typical of the Moserothi way of thinking—the assumption that all good fortune comes hopelessly entangled with unwanted baggage, and the reciprocal belief that even the worst misfortune has a speck of hope attached, like a tenacious parasite, to its side. The scales may tip toward bad or good for a while, but it's a trivial and temporary distinction. They are both ever-present.

Sometimes I wonder what it must be like to live on a world of clear delineations, of winnable battles. I think Santiago sees the rebellion with the off-worlder perspective of his parents, as if the conflict is concrete and finite, as if one side will attain a definitive victory. But we are Moserothi—we cannot win without losing. This has been my experience, anyway. I've never felt able to tease apart the good from the bad in life.

We duck and cover our faces as the skylight cascades down upon us in thousands of pieces. My senses kick into high gear, adrenaline hot in my veins, and I reach for Duyi's arm, knowing only that we have to get out of there. But there's no time.

Ropes fall through the gaping hole in the ceiling, and half a squadron of Regency guards zip down to the floor. They're decked out in gray ceramic body armor and faceplates, and each one is carrying a rifle.

I drag Duyi toward the stairs, but there's another pair of guards silently ascending, and we're forced back. One of the guards behind us speaks into a comm, "Target acquired. We're clear for the regent."

I share a glance with Duyi, and though neither of us says it, we're both thinking, *She came in person?* I can hear her enter the warehouse, her heels clicking on the concrete floor. The sound echoes. It seems to take her forever to cross the length of the building and climb the stairs. We're both breathing fast, even though there's nowhere for us to run.



The regent arrives with another pair of guards as escort. She looks immaculate in royal blue business-wear, her black hair slicked back in a tight bun. Duyi backs against the nearest wall—not so much for tactical advantage as out of sheer lizard-brain terror—and since my hand is still on his arm, I go with him. Better to face this together.

Oddly, the regent turns her sharp gaze on me first, as if Duyi weren't present. I cannot recall her ever addressing me directly before. "Guardsmen Feng, you have allowed your charge too broad a sense of freedom. It is time to escort him home. That's an order."

I brace for the Imperative to respond. It gives a single reflexive kick, the old familiar pressure behind my eyes. But betraying Duyi would not make him happy, would not make him safe, and I focus on this truth to quell the sensation. I accepted my Imperative—I trained it instead of allowing it to train me—and now this program in my brain, this artificial seed of our real friendship, can no longer be used against us.

Steadily, I say, "I'm afraid I don't take orders anymore, regent. We go where we wish to go."

"I gave you everything!" she says, her tone turning cold as ice and sharp as glass. "Did you know your father—a cripple with too many mouths to feed—practically begged them to take you away? He traded you away for a comfortable pension. I gave you a livelihood, a purpose—you were selected over other candidates to receive this honor. And how do you repay me?"

This is more than I can remember of my father. Crippled—injured in the mines? And is it true he sold me to the Regency Guard of his own free will? I know I should feel something, but I don't have the necessary emotional triggers—that part of me was hollowed out eight years ago when they wiped my memory. "Father" has been reduced to an academic term.

"Brother" is the only word that counts for anything, now. I lift my chin. "If I ever had any debts to you, regent, I have paid them and then some."

"Duyi," she says, smoothly switching her tactic, "he has poisoned you against me. Can't you see this?"

"No, you did a perfectly adequate job of that all on your own, *Sister*." He spat out the last word as if it were a curse.

"That's enough, Duyi. You will cease this childish show of defiance at once," she snaps, her patience gone. "It's time to grow up. Gather your things, we're going back to the estate now for the ceremony."

Her casual dismissal of him, her assumption that he'll bend under her manipulations, sends black hatred coursing through my veins. A memory flashes through my mind of ten-year-old Duyi trying to hide the fact that he'd been crying so she wouldn't castigate him for being weak.

"You're a monster," I say, the words spilling out, "and the most awful part is, you're the only one on the planet who doesn't know it."

Her mouth twists, furious, and her voice turns to ice. "Drop him."

In one swift motion, all the guards lift their guns from low-ready to aim at me.

"No!" Duyi yells, getting in the way, clinging to me. Most of the guards aim away in time, but only most. A single bullet goes through both of us.

Duyi was almost sixteen when the direness of his situation struck him. A screen in his chambers had always displayed a portrait of his dead parents, and he tore it from the wall. He had smashed it against the floor over and over again until flecks of circuitry scattered across the carpet like stars in a wine-red sky.

"How could they do this to me? Have a kid just so he can be enslaved to their ob-



solete programming. What kind of legacy is that?" His chest was heaving from exertion and anger, and he looked as if he were thinking of stomping on the wreckage for good measure.

"You know I'll stand by you, no matter what you become." I meant it as a comfort, but it made him angry.

"What, do you *want* me to be like you? Slave to the implant! Would that finally satisfy you?" He reached out his hands to shove me, and I let him, his push knocking me back two steps.

I stared at him, baffled. What had he meant, satisfy?

"Ugh!" He threw up his hands. "Nothing ever fazes you."

Quietly, I said, "Of course things do, but I'm not supposed to show it."

His anger leached away, and he sank onto a settee, head in hands. When he spoke, the muffled words leaked between his fingers. "I'm sorry. I just don't know what to do."

"If . . . if there was a chance to stay yourself, would you take it?" I asked tentatively. "No matter the cost?"

Duyi dropped his hands from his face and gave me a sharp look. "*Anything*." He said the word like an oath. "I would do anything, just tell me what to do."

I sat beside him, bracing myself to voice thoughts that couldn't ever be unsaid. Thoughts of treason. "I've heard the other guards speak of a rebel group—they call themselves the Freeminers. Their mission is to bring down the Regency."

Duyi laughed bitterly. "Well they're certainly not going to help *me*, then."

"Not at first. We'll have to leak them intel, earn their trust, but we have time. We have a whole year. And in the end, you have the one thing they need the most."

His eyes widened. "The symbionts. Oh, symrock. This could actually work, Feng."

"So . . . you want me to initiate contact, then?" I fetched a tablet and paged through Duyi's calendar, cross-checking it against areas of recent Freeminer activity. "Perhaps at the festival in New Hsinchu next month."

"Yeah, it'll have to be sometime when we can sneak away from the guards. There'll be crowds at the festival. We need to make a plan."

I nodded, still looking at the tablet. "As you wish, young master."

"You can't call me that anymore, Brother." It wasn't the words so much as the pained note in his voice that made me look up. "Not if we're going to do this together."

I blinked at him, for a moment stunned. "You're right," I said, and held out my palm in the same gesture he'd greeted me with all those years ago. He laid his palm in mine, accepting me as an equal, and I said, "Brothers, then. Brothers forever."

I wake in the hospital, but Duyi is dead.

He did save me, after all, though not in the way he had intended. When the bullet passed first through him, then through me, the infection transferred blood-to-blood. By law, not even the regent has the authority to order the execution of a symbiont host. Duyi's blood renders me untouchable, a walking one-man sanctuary.

The transfer shouldn't have been possible. The regent's family has certain genetic markers that predispose them to supporting the symbionts, but I have no genetic compatibility. The doctors theorize it may have something to do with chronic exposure, my years of proximity to Duyi's symbionts giving my body time to adjust to them and them time to adapt to me.

They tell me he died in my arms, but I imagine it was more that we slumped to the floor in a tangle. I don't remember. I have plenty of time in the hospital to regret I was not conscious for his last moments of life. His absence feels unreal; I know he is dead, yet I keep expecting him to walk through the door. The doctors tell me I will adjust, in time, but they tiptoe through my room as if I am as fragile as blown glass.



I think they worry the Imperative will drive me insane, now that the focus of its influence is gone. They don't understand that the Imperative hasn't really mattered, not for a long time now.

I wish I could tell my younger self, *all of this is real*, so I wouldn't have wasted so much time doubting Duyi's sincerity. But I suppose you can't truly *know* someone loves you enough to die for you until they do.

The regent wants me remanded to her custody. The night before my release date, the Freeminers send an escort of two men dressed as Regency guards. We walk right out through the front doors. The hospital staff isn't stupid—they can tell what's happening—but the uniforms do them the service of plausible deniability. *What do you mean he's disappeared?* they'll say in the morning. *A Regency escort picked him up last night.*

The Freeminers tell me Santiago's still alive. There's a certain irony, here—the regent was so focused on capturing us that the leader of the revolution slipped out of town undetected. The Freeminers act as if this counts as a victory.

They deliver me straight into Dr. Anwang's care. Santiago hovers, anxious to hear that I'm fit and able, but Anwang shoos him away. She prescribes more rest and runs her own set of scans and blood work. I sleep most of the day away, because it's so much easier than being conscious.

The next afternoon, Anwang has results, so she and Santiago pull chairs up close and huddle at my bedside.

"I know this is a hard time for you to talk about this," she says, taking my hand and squeezing it, "but you need to hear what I found. It wasn't just Dui's colony that was adapting to you. The whole Regency strain has been adapting to humans for half a millennium. It's not nearly so specific anymore, probably hasn't been for a long time, we simply didn't know because so few people ever get exposed to Regency blood."

I blink slowly at her. "Are you saying that I'm . . . infectious?"

"Not yet," she says. "But when your symbiont load is mature, we might be able to infect as much as 5 or 10 percent of the population from your blood."

Santiago's head snaps up. "You think there could be that many viable hosts?"

She shrugs. "The data are only preliminary, and it will take time to do so many inoculations, but I think it wouldn't be unrealistic to aim for a stable five-percent infection pool in the future."

Santiago steepled his fingers in front of his mouth, looking humbled by the news. "That would change . . . everything. We could put an end to the whole political structure."

Where before he hoped to depose one dictator in favor of a somewhat less sociopathic replacement, now he can eliminate the Regency's power altogether. I can almost see the thoughts and plans churning behind his wet, shining eyes. The cognitive dissonance is intense, watching Santiago feel more hope and joy than he ever expected possible when the ashes of my own life's destruction have hardly cooled. I'm not ready to feel happy about anything yet; I can't even imagine what it might be like.

I agree to cooperate with whatever they need. Dr. Anwang does more tests, takes more blood, prepares for the initial round of infection trials. I follow Santiago to political rallies and show off what I can do. He does most of the talking. I'm shaky at first, but I gradually gain some proficiency at controlling the symbionts.

I tell people I will overthrow the Regency to honor Dui's memory, because he died for the cause. But the truth is, he died for me. I simply need *something* to do with my life, now that he is gone.

This will do. I am Moserothi—a speck of hope is as much as I can ask for. ○



# ARLINGTON

Jack Skillingstead

**The author tells us, “I really did get lost over the Olympic Peninsula when I was sixteen years old, trying to accomplish my first solo cross-country flight. And I really did land at the near-abandoned airfield described in the story that follows. After that the truth gets a little sketchy.” Jack’s new novel, *Life on The Preservation*, recently came out from Solaris books. In December, he will be a teacher on the Bahamas-bound writer’s workshop and cruise, *Sail To Success*, along with Nancy Kress, Mike Resnick, and a few others.**

**T**hree thousand feet below the wheel fairings of my Cessna 150 trainer, a perfect sheet of fog pulled off the Pacific and covered the Washington coastline. To my right, the Olympic Mountains bulked jaggedly against the sky. I had to duck and crane to see the top of Mount Olympus, nearly four thousand feet higher than my flight path. I was sixteen years old, alone on my first solo cross country flight, a requisite part of my training before I could apply for my pilot’s ticket.

And I was lost.

Okay, not *lost*, exactly. I knew my approximate location. All I had to do was look out the windows. VFR is what they call it when you can see where you’re going: Visual Flight Rules. Even though the coast line was obscured by fog, the Olympic Mountains still presented a pretty distinctive reference. But mostly I was relying on my VOR instrument, and that was a mistake.

VOR is short for VHF Omnidirectional Radio. Aviation is full acronyms—it was even back in 1982, when I got lost over the Olympic Peninsula. With a VOR you tune in the station, center the little arrow on a compass dial, and fly straight along the selected radial. Theoretically you don’t need VFR conditions to do that. It’s how I found my way from Crest Airpark, a small private field east of the Kent valley, to the logging city of Hoquiam. From there I turned north, switching to the next station, which was in Port Angeles—and that was the mistake. VORs are line-of-sight signals, and I did not have a line-of-sight to Port Angeles. The mountains were in the way. I should have stayed on the Hoquiam signal until I’d traveled far enough up the coast to clear the mountains.

The signal was faint. I got worried and hauled back on the yoke, trimmed the elevators, and started climbing, on the assumption increased altitude would translate into a stronger VOR signal. My hands were damp, and I gripped the yoke too hard. I was sixteen. Not only was I an inexperienced pilot, I was an inexperienced *human being*.

A 150 trainer is a very small airplane. Four cylinders and a hundred horsepower start to feel inadequate the higher you go. My airspeed had dropped to fifty-six knots. Considering my steep angle of attack, that was uncomfortably close to a stall.



The Cessna's airframe shuddered in the unstable air around Mount Olympus. The controls felt mushy.

A peculiar white cloud hung in the sky directly in front of me. It had the general look of a small cumulus, that vaguely popcorn shape that encourages day dreamers to see dragons or schooners or whatever. To me this one looked like a Mickey Mouse head. But what made it peculiar was its seeming flatness, the way it appeared to be painted right on the sky, in two dimensions. Soon it felt like I was falling toward the cloud instead of climbing laboriously. That scared me, and I attempted to veer off but I was too late. It was almost as if the cloud were pulling me in by gravitational attraction. In the next moment the world turned white.

## 2012

My name is Paul Birmingham. I don't know how old I am now. But in 2012, when I was forty-six and dying, I decided it was time to go flying again—thirty years after that day I got lost over the Olympic Peninsula. The idea came to me late at night in a nearly deserted office bay. I was an engineer by profession, and I worked graveyard shift for the Boeing Company in Everett, Washington.

I liked working graveyard for the same reasons most people hate it. Being awake in the small hours after midnight put me out of sync with a world I always felt out of sync with, anyway. I shut off the overhead light panels and set up a lamp in my cubicle, the kind of lamp you'd find in somebody's bedroom. Over the course of my six-hour shifts I toggled between 3D renderings of structural spars and dense blocks of text on physics websites. Only the spars were part of my job.

I was not a "God" man. I was not a believer in the mystical—and I still am not. That's important. I was an engineer and possessed an engineer's mind, the kind of mind that wants to figure out how things work in the real, observable world. If I were imprisoned in a medieval fortress, I would not waste my time praying for freedom. I would study the foundation. I would contrive tunnels. The physics stuff—much of it beyond me—was like studying the secret layout of the world prison in which I found myself.

In my entire office bay there was only one other guy. We never talked. He knew nothing about me and I knew nothing about him. He didn't know I was dying, for instance, or that a stroke killed my mother when I was fifteen years old, killed her dead right before my eyes. I had to pass his desk on the way to the bathroom. He was always working, intently focused on some project, his shirt sleeves rolled to his elbows. He never looked up when I walked by. He might as well have been set dressing in somebody else's play. I had come to a place in my life where this point of view did not strike me as irrational.

A window in the corner of my monitor was linked to a Harvard physics page about "flop transitions." The material was pretty dense but I stuck with it, as I imagine God-inclined people will stick with even the dullest parts of the Bible.

I was forty-six years old and dying; but then, I'd been dying ever since Quillayute. By centimeters, and painfully.

## 1982

In the sudden whiteout my instruments lost touch with reality. The altimeter froze. The artificial horizon flipped like a dead man's eyeball. A windy hiss came through my headset, like what you get when you hold a sea shell against your ear.



The compass attached to the top of the instrument panel stopped pointing to magnetic north. It bobbed and swung and dipped like it didn't know *what* to point at. This was not an electronic device but a simple magnetic compass, so basic and straightforward in principle that its origins date back to China in the second century B.C. And yet the compass in my little Cessna was now, inexplicably, broken.

The engine strained and whined, and I strained with it. The hard plastic yoke was slippery with my sweat. White vapor erased the Olympic Mountains, the sky, the terrain below, stranding me in a void without reference points. I couldn't even tell which direction was up and which was down. My inner ear told me I was banking right. Probably that wasn't true. Inexperienced pilots can easily become disoriented if you steal their VFR conditions. I panicked, depressed the left rudder pedal, and banked left while still climbing. The Cessna stalled and rolled over.

My instructor, Jim Brodie, had taught me how to recover from something like this, relying on instruments alone. But my instruments weren't working, and my panicked yanking and wrenching at the flight controls made things a lot worse. In a normal nose-up stall, an airplane will recover by itself, if you simply let *go* of the controls. It's counterintuitive, something a mature pilot knows to do. But that wasn't me. I wasn't mature. And besides, it wasn't a simple nose-up stall. I was simply SOL—another useful acronym, applicable not only to aviation.

Shit Out of Luck.

And then, suddenly, I dropped clear of the white cloud. Sunlight flooded the windows. Shadows swept around the cabin as the airplane tumbled. My instruments resumed functioning. I corrected the stall, established level flight, with altitude to spare. I was shaking—and I laughed, a kind of hysterical bark, like someone on a rollercoaster after the first serious dip, the one where you were *certain* the car was going to jump the tracks.

A couple of thousand feet below, the Quillayute airfield lay clear in the midst of the world's only temperate rainforest. It had been my lunch-stop destination, but thanks to crappy navigation I almost missed it altogether. Quillayute was an old Navy project, thrown together in the 1930s and used during World War II as a northern blimp patrol base as well as for fixed-wing operations. Supposedly it was deserted, practically a ghost airport. That had appealed to me when I was plotting this cross-country flight.

But as I set up my approach, I was struck by the number of airplanes parked all around the field, in no orderly fashion. A lot of them seemed to have halted randomly and been abandoned by their pilots. One was parked on the south end of the runway, a tail-dragger, its front wheels in the grass, back wheel still on the tarmac. I glided right over it, my prop feathered. The tail dragger had no forward window. It reminded me of the plane Charles Lindbergh flew across the Atlantic. How long ago were airplanes like that in general use?

I touched down for a bumpy landing. Weeds grew out of cracks in the neglected tarmac. My hands were still shaking, and my feet on the rudder pedals felt blocky and uncoordinated. I knew damn well I had almost been killed, and my body knew it as much as my mind did.

I steered my trainer onto the ramp and shut off the engine. In the absence of the racket it was so quiet. I climbed out and stared at the sky, which was perfectly clear, perfectly blue, except for that one puffy white popcorn cloud. Even from the ground it looked unnaturally flat, a cloud painted on blue canvas. But I'd flown into something big, all engulfing.

A couple of World War II-era wooden hangars stood on the south side of the field, one of them falling apart. Daylight showed through wide gaps in the boards. Between the collapsing hangar and a rusted-out fuel island was a thing that looked like a big metal



insect, a beetle or something. It stood about five feet off the ground on four articulated struts. From the air I'd taken it for a liquid storage unit. But from this close it looked alien and out of place. The hairs prickled up on the back of my neck.

There was nobody in sight, but there *were* all those airplanes parked every which way. Some of them looked old enough to be vintage antiques. Others looked like designs straight out of a *Popular Mechanics* "Future of Aviation" issue. One I hardly even recognized as an airplane. Its long, elegant wings were folded close to the fuselage, like the wings of a bird, and the wing tips swept up. A forward blister must have been where the pilot sat, but it appeared to be made of mirror glass.

A Piper Cub with its left door hanging open dated back to at least the early 40s. In 1982, it was possible but unlikely that somebody would still be flying it around. A Beechcraft Bonanza with the distinctive V tail hunkered nearby on the ramp. It looked old, but not *that* old, maybe late 1950s. I peered through the windows, shading out my reflection by cupping my hands around my eyes. There were coloring books and crayons on the back seat. Bobbsey Twins. Buster Brown. The titles sounded vaguely familiar. As a sixteen-year-old I was solidly, myopically, entrenched in 1982. But I knew no self-respecting modern kid would be caught dead coloring in the Bobbsey Twins.

The airport windsock hung limp, the red fabric frayed, weathered to pale pink. Not a breath of air moved it. The silence pressed against my eardrums. I felt a strong urge to climb back into my Cessna and get out of there. My brown-bag lunch lay in the right-seat foot well, where it had tumbled when the trainer stalled. I pulled myself in and started to reach for it.

Far away and faint, someone screamed.

I froze. After a moment I backed out of the plane, still listening, my breath shallow and my heart beating heavily. The cry had been so faint and distant that I wasn't even sure I really heard it. I stepped out from under the wing. I'd heard it, all right. I just wanted to pretend that I hadn't. It had come from the forest, a girl's brief cry, suddenly cut off. I looked in that direction, straining to see something—and I did. In fact, it was weird that I hadn't noticed it before. A pair of heavy wheels had left parallel tracks in the grass beyond the end of the runway. Those tracks ran right into the wall of the rainforest. The big olive drab tail section of some kind of military plane stuck out of the trees. It was the paint job that made it less noticeable, I guess. It was *supposed* to blend in.

I walked toward it, my feet swishing in the high grass between the wheel tracks. It was a World War II bomber, a B-17. The pilot had crashed into the trees, and the rainforest canopy had folded over it like a lid. The starboard wing was ripped half off the fuselage. When I got close enough I picked up the sharp smell of high-test fuel.

I leaned inside the open hatch. The fifty-caliber machine gun swivels were tied down and the plane was empty, like all the others. An odd sound drew me out of the hatch. It came from behind me, from back toward the runway. It sounded like a *sonar* ping—at least, the way sonar pings sounded in the war movies I'd watched. A single hard ping, rippling out, and then the oppressive silence again.

The runway, hangars, and jackstraw scatter of abandoned airplanes all looked the same—but *something* had changed, and I couldn't figure out what. I looked up, half expecting to see a Corsair or a P-51, or maybe even a flying saucer banking out of the clear sky. But there was nothing except that one cloud, still hanging motionless above the field. The *cloud* was different, but you'd expect it to be. Clouds are nothing but tiny droplets of water vapor. They're so inherently unstable that a sky of scattered cumulous never looks the same for long, letting kids play endless games of see-the-dragon. This cloud, though, wasn't pulling apart or reshaping—it was shrinking. Shrinking while keeping the shape it had started with. The popcorn shape, the vaguely Mickey Mouse shape. Clouds didn't behave that way.



I sensed someone behind me and turned around fast. A little girl, maybe eight years old, started to duck behind a tree but stopped when she knew I'd seen her. She was wearing a yellow blouse, pleated skirt, and two-tone shoes. Immediately, I associated her with the Beechcraft. Her blouse was dirty and one of the sleeves was torn. Her blond hair was done in a sloppy ponytail, a half untied green ribbon straggling at the knot. A long red scratch crossed her left cheek. I said, "Hello."

"You should hide," she said. Very serious.

"Hide from what?"

"Them."

"Did you scream a little while ago?"

"That was my sister, Tammy. She stepped in a hole and hurt her ankle. Now she can't run."

"What's your name?"

"Amanda."

"Where are your parents?"

"The things got them. You need to hide now."

I took a careful, non-threatening step in her direction, and tried to make my voice as friendly as possible. "How did—"

Another one of those weird, hard-sounding sonar pings went off behind me, the echo rippling out. I looked towards the runway, and when I turned back to the little girl, she was gone.

"Hey. Hey, kid!"

Her yellow shirt flashed. She'd already covered quite a distance. I started after her, jogging fifty yards into the forest. Under the trees, the shade was dense, the quiet even more oppressive. I stopped when I saw the mail. Dozens of envelopes, letters with stamps on them and hand-written addresses, lay scattered around my feet. Above me a wooden-framed biplane hung in the branches, the sun passing amber through the torn fabric wings. A big hole gaped in the side of the plane. Painted in black letters along the fuselage were the words: US MAIL 246.

I picked up one of the envelopes and turned it in my fingers. The paper was thick and heavy compared to a modern business envelope. The return address was the US Department of Defense. Absently, I folded the envelope and shoved it in the back pocket of my jeans.

*You better hide*, the little girl had said. Hide from what? *The things*.

"Hey, kid, come on out!"

Nothing.

I left the forest and headed toward the hangars, thinking there might be a phone or something. I doubted I'd get anyone on the Cessna's radio, at least not while it was on the ground. When I reached the fuel island I stopped dead.

The beetle-looking liquid storage tank was in a different position.

The front struts were now planted forward, the smooth silver body leaning slightly down. I stared at it, as at an optical illusion. My stomach moved queasily.

Someone came running toward me, then, out of the forest on the other side of the runway. He wore a brown leather jacket, white scarf, tan pants that ballooned at the hips, and boots. When he got closer I saw it wasn't a "he" at all, but a woman with blonde hair cropped shorter than my own. She reached me, panting for breath.

"Kid, if you don't come with me right now, you're a goner. We've got about one minute to skedaddle."

"Who are you?"

"Did you hear what I said about one minute?" She grabbed my hand and started pulling. Her fear and urgency communicated through me like electric current. I started stumbling along and then we were running together, flat out, across the run-



way and into the trees. A third sonar ping sounded, the echo rippling in sick wavelets right through my body. "Down." The woman yanked me to my knees, and when I stayed like that she shoved me forward onto my elbows. I started to complain and she shushed me. Then the terrible stuff began.

I was raised Catholic. My mother's faith pulled my family along, pulled us to church every Sunday, to CCD classes, to confession. She kept us, my big brother, my dad and me, on the path. Dad was our anchor in worldly affairs, the affairs of bills and mortgages and oil changes. Mom was in charge of God. And when my mother died, Dad did his best to hold us together and carry on. Sometimes his holding-together looked like a man clinging to a ledge by his fingertips. But he never let go. He never fell. Once, a couple of weeks after her death, Dad came home with a bottle of gin in a brown paper bag. He had quit drinking a few years before. Weekends and holidays had become less tense. His quitting had been like the lifting away of a shadow.

The sight of the gin bottle frightened me.

He never opened it. In bed one night, I heard him crying. Frightened, I slipped down the hall to the kitchen. He was sitting at the table, that bottle of gin in front of him, and my mother's rosary in his fist. He didn't see me, and I was too scared to approach him. A little while later he came in and sat on my bed. I pretended to be asleep. He wasn't crying anymore. After a few minutes he stood up, kissed my forehead, and went away, leaving the hall light on, the way I liked it. I never saw the gin bottle again.

Dad tried to pull my brother and me along, the way Mom had. But for me, once Mom was gone, my faith also departed. I needed something to believe in, but it wasn't going to be God. For a while I maintained the rituals of Mom's faith, the routine appointments with God. Religion is full of rituals. But so is science. Both are seeking the truth, driven by similar impulses; both want *answers*. In the Catholic church, for instance, there is the ritual of transubstantiation. The priest dons his robes, speaks the Latin words, retrieves wafers from the Tabernacle. At the same point in every service, he invites the congregation to approach the altar and receive the blood and body of Christ. Because of the repeatability of the ritual, and the belief of all involved, it works every time. Of course, you couldn't demonstrate any such thing in a lab. But that's the difference between religion and science. For a priest it's enough to believe in the answer. For a scientist, it's enough to believe in the method of obtaining the answer.

In the seventies, some parishes still offered "the cup" to adult laity. During communion the Sunday before my mother died, our parish priest startled me when, after placing the Host on my tongue, he touched the chalice to my lips. I had never tasted wine; alcohol was banned from our house. For days afterward I debated whether it had tasted like blood, which was illogical, even within the context of the ritual. After all, the wafer never tasted like "flesh." At Mom's funeral, crying, staring at my lap while the priest spoke his useless words, a ghost of the wine's bitter taste returned.

## 1982

The beetle-looking thing stepped haltingly away from the office on its jointed stilts. "What is it?" I whispered.

"I don't know for real sure," the woman said. "I call them hunters. Keep down and keep quiet, or you'll see why. That one does nothing but stand quiet as a tombstone, right up till you hear those three echo sounds. It comes a little bit more alive with each one. Those sounds, they're like a doorbell. Somehow that one there answers it and opens the door. But that's not all it does. I believe it transmits some kind of sig-



nal to the others, whenever a fresh victim turns up. That's what you are, kid. The fresh victim."

I didn't like her calling me kid, especially since she didn't look all that much older than me, with her little upturned nose and brown freckles. While she whispered, the beetle walked into the middle of the runway and stopped. Each leg had a joint about in the middle, like a knee, except they bent the opposite way a human knee would bend, inward instead of outward. Now the knees all bent at once, and the beetle squatted low to the tarmac. After a moment, the air in front of the thing became blurry, like the way air looks above a hot road in the distance, almost a liquid appearance of rising heat. In no time the air swirled into a white mist screen, hanging there on the tarmac, wafer thin.

"That's the door."

Out of the mist three more of the beetle things came stalking forth. One ran directly to my Cessna. I mean, it really was like a giant silver bug, moving in that quick scuttle on its set of backward-jointed legs. The sound of those legs clacking on the tarmac gave me an awful feeling. It was such an *alive* sound. A cable extended from the nose of the thing's body and probed through the open door of my plane. I imagined it was sniffing around, trying to pick up a scent. Trying to pick up *my* scent.

The cable withdrew from the cabin—and it was holding my lunch bag. It brought the bag close to its body for a moment, then dropped it. The other two beetles had remained motionless after their initial appearance. The cable slithered back inside the third one and it clickity-clacked back over to join them. They stood in a close circle, motionless, as if discussing what to do next. After a moment, my head started to hurt. I closed my eyes, like that would help. It didn't. The ache worsened, a drilling, hot, yellow pain.

The freckle girl nudged me. Her eyes were the blue you see in a fire. "Now you listen to me," she whispered. "We can block whatever it is they're doing in our heads. You just got to concentrate real hard on something else. I mean concentrate like you're gonna bust a vein. Do that and it backs off."

"I don't *understand*." My voice trembled.

"Do it. Concentrate."

Shapes, vague and eager, humped forward in my mind. A sound like a crowd of foreign voices rose up. I couldn't understand any individual word. I concentrated, imagining a fence between me and the shapes. It was the old wooden slat fence from my backyard, leaning and half rotted, that couldn't keep out so much as a bunny rabbit. But I made it strong by concentrating on every detail. I was aware of the questing shapes trying to nose through the fence to get at me. But as long as I didn't give them my attention, as long as I focused on the fence, they became less urgent, less potent. The crowd murmur reached an inarticulate peak then subsided, like a wave crashing against and withdrawing from a breakwater. My mind became quiet, and I let go of my rickety fence and came out of myself, blinking, rubbing my eyes.

"Howzit?" the freckle girl asked.

"Okay, I think. What are those things doing now?"

"Giving it up, I hope. Lot of time, what I think happens is the new arrivals are so confused they tend to hang around the aerodrome. Easy pickings."

"Like me?"

"Yep, like you."

"What do they do if they catch you?"

"Carry you through the door. I've seen it. I'm not always so dumb I try to *save* anybody. But heck, you looked so dang pathetic, I almost couldn't bear it. My name's Maggie, by the way. Maggie Farmer. I haul the mail. Or used to, I guess."

"I'm Paul."



"Glad to meet ya."

"So why do you hang around here? Aren't you scared?"

"Heck yes, I'm scared. Not as scared as you, I bet. But if there's a way to escape, it's right here. The whole world is like this aerodrome—empty. When I first got here I had a bad feeling about Quillayute, and I kept going, flew my ship as far as Astoria, then inland to Portland. There isn't a soul around, as near as I could determine. Except for maybe the handful of folks that dropped out of the same hole we did and then didn't get caught by the hunters. Maybe some of them are still out there. What I want, I want to go back to the other world, the one that's filled up with people. That's why I keep coming back. This was the way in, so it's got to be the way out, too. Right?"

"US 246. Was that your, ah, ship crashed in the trees?"

"Yes, but it's no reflection on my piloting skills, and don't think it is. Truth is—" Maggie's face blushed, which made her freckles stand out even more, and she looked both angry and embarrassed. "Truth is, I ran out of fuel. The damn doorbell was going off as soon as I landed. Guess that ship with the tail that looks like a vee had just dropped in, and I didn't even know it. I was already running on fumes, coming back from Oregon. When I heard the chime, I didn't know if it was the first one or the third one. I throttled up without thinking. Lucky for me, if you want to call it luck, is the hunters got their hands full with the folks from the vee plane, and that gave me time to climb down from the crash and hide."

"There was a little girl—" I started to say.

"Hold it. They're moving."

The three machines scuttled off in three different directions. One of the directions was *our* direction.

"Shoot," Maggie said.

"Maybe we should run."

"Those things go like race horses. Just keep your dang head down and pray, if that's what you do."

I kept my head down but my eyes open. My heart was beating like crazy. What would happen if one of those things carried me through what Maggie called the "door"? That's when I noticed something. The white mist doorway was gradually shrinking.

Like the popcorn cloud over the field.

What if the cloud was all that was left of another doorway? Was it a trap, deliberately created by the beetles, or just some kind of lucky accident for them, regularly delivering up victims? I remembered the feeling of being pulled in, as if by a force of gravity.

The backward-jointed legs of the nearest beetle swished in the undergrowth. It paused every few yards and swiveled its dome, maybe sweeping the area with some kind of sensor.

Hunting for us.

Maggie squeezed my shoulder. I looked over. She was staring at me with those blue-fire eyes, and I knew what her look meant. The beetle was going to get us, and there wasn't a damn thing we could do about it. I was so frightened my body was paralyzed, and I felt cold and hot at the same time.

Then a girl screamed.

The beetle on the verge of discovering us pivoted and scuttled back to the runway. All three were converging—and the one that had gone hunting in the direction of Maggie's mail plane emerged from the forest holding a child coiled up in its tentacle. It wasn't the girl I'd already talked to, it wasn't Amanda. It must have been her sister, Tammy, the one who'd stepped in a hole and couldn't run. The girl had lost a shoe. Her white ankle sock made her seem even more vulnerable. She flailed and screamed.

"Oh, my God," Maggie said.



I hated myself for not acting, for not trying to save that child. With a huge effort I fought through my fear and tried to stand up, but Maggie grabbed my hand and wouldn't let me. Her fingers were cold and her grip was like steel bones, digging in.

"You can't help her," she said.

I twisted my hand, trying to break free, and I saw Maggie's face. She was in agony, tears streaming down her cheeks. Then the captured child's sister bolted onto the runway and ran straight at the monster that was about to scuttle through the shrinking doorway, where the other two had just gone. Amanda had a short, broken-off tree branch in her hand, a club. Her yellow ponytail bounced as she ran.

"*Dang*," Maggie said, and before I knew what was happening she had dropped my hand and was up and running, sprinting toward the field.

The beetle hesitated when the sister appeared. Maggie intercepted Amanda, snatched her up around the waist without breaking stride, and continued across the field toward the trees behind the dilapidated hanger. The girl fought her all the way, but Maggie wouldn't let go.

The beetle coiled its tentacle in, like tightening a watch spring, then snapped it straight out—flinging its screaming captive into the diminishing white screen of the doorway. Tammy's scream skirled away, like something spinning down a deep well.

By then I'd broken cover, too, and was running full out. It was like my body was doing something my mind hardly knew anything about. The beetle was halfway to the trees, in pursuit of Maggie and the sister, when it sensed me and turned. I guess it sensed me, because I was yelling all kinds of raging profanities at it, making as much noise as possible. I *wanted* the damn thing to sense me, to come after me and leave Maggie and the girl alone.

When it did, I veered toward my Cessna, pouring everything I had into my legs, sprinting for my life. I didn't look at the beetle again until I was inside the trainer with the door shut. The beetle came on fast, legs a blur of furious energy. I turned over the prop, shoved the throttle in, like I wanted to ram that knob right through the instrument panel. The tac pegged into the red zone, and I kicked in the right rudder pedal, turning my flimsy little airplane around on the ramp. The other-world door and the metal beetle racing toward me meant I couldn't use the runway, so I powered along next to it, the Cessna jolting and bouncing, half out of control, gaining speed, prop kicking bits of gravel against the cowling.

I was up to forty-nine knots—too slow, but I pulled back on the yoke, anyway. The Cessna lifted indecisively, the tricycle gear touching back down a couple of times, like the wheels didn't want to let go of the earth. The beetle extended its tentacle and whipped it against the fuselage. It sounded like a hammer striking sheet metal, and the trainer yawed wildly across the runway toward the trees. Climbing sluggishly, I cleared the tree line with only a couple of feet to spare.

Blue sky filled the windows. I banked right, my wing pivoting over the airport. The door and the third beetle were gone. The one remaining, which I'd originally mistaken for a storage tank, had returned to its place between the hangar and the fuel island. It was almost as if none of it had happened. There was no sign of Maggie and the girl. In the trees they wouldn't have been visible, and I allowed myself to believe they had gotten away—that I had given them that chance. But for a minutes, hanging up there in the safety of the sky, I felt guilty. How could I save my own ass and leave them down there? But then I let it go, because I had to concentrate.

The white popcorn cloud hung motionless in the clear air above me, its original Mickey Mouse head shape remarkably unaltered, except in size. I banked steeply and climbed in a spiral toward it, praying that I was right in thinking the unnatural behavior of this cloud indicated it was somehow related to the white mist doorway the beetle had opened on the runway.



The altimeter indicated seventy-seven hundred feet. In the time it had taken me to climb that high, the cloud had further diminished in size. If I had been looking at it from the ground I probably could have covered it with the end of my thumb. Up close, it was barely as wide as the trainer's wingspan, about thirty-some-odd feet across. I ascended into it without much hope, expecting only wisps of white vapor to blow past my windshield.

Instead, it totally engulfed my plane.

The world turned white. My instruments went haywire again. The magnetic compass swung and bobbed without direction. I lowered my head and fought my inner-ear instinct to roll left. I held on, held on . . . and then the mist blew away, and I was staring at the massive rock and ice face of Mount Olympus, unstable air buffeting my Cessna.

I was back.

## 2012

Thirty years later, I simply wanted to find *something* that worked—a practical ritual I could believe in, something to resurrect the events at Quillayute. Migraines plagued me. Body aches, intestinal agony. Burning pain throughout my body. Doctors investigated all these symptoms and more, to the limit of my insurance coverage, then stopped. They could find nothing to pin a bill to. I may have displayed symptoms of cancer, but no cancer was evident. I may have displayed markers of Fibromyalgia, prostatitis, even brain tumors—but there appeared to be no causal events. Insurance coverage does not recognize symptoms without cause. And yet, my body was so clearly betraying me. Only one doctor used the word that must have been on everyone's mind: *Psychosomatic*. Ironically, he's the one who prescribed Demerol.

Pain can be inspirational, and I wanted to believe.

It took only a few days to track down the 150 trainer I'd flown back in 1982. November 60558 was registered to a dentist in Redmond, Washington. At first he wasn't inclined to part with it. I overcame his reluctance with money, depleting twenty-seven thousand dollars out of my pension fund. But what did I care? I would probably be dead long before I ran out of money.

The dentist had stripped out all the old avionics and replaced them with the latest instrumentation available. I hired a mechanic to restore the 150 to its original configuration, outmoded instruments and all. I wanted it in exactly the condition it had been when I last landed at Crest Airpark. The mechanic thought I was crazy, but he did his work well.

I hired an instructor, but didn't keep him long. He wasn't a proper acolyte, always asking if I was all right, if I was sure I was up to this. What he saw was the pain. I left my Demerol on the ground for these refresher flights. Anyway, the basics of piloting came back to me quickly, the muscle memory part of it. After a few lessons I felt competent to do what I needed to do.

I left Crest Airpark at the same time of day as I had when I was sixteen. I'd kept my logbook and knew the time down to the minute. Of course, this was all ridiculous. Magical thinking. Not really *thinking* at all. Even if the plane was similar, the weather wasn't. Broken clouds and five-mile visibility over the Olympic Peninsula. I feared my ritual in the sky was as bankrupt as the Catholic ceremonies of my boyhood.

By the time I was on an outbound radial from the Hoquiam VOR, I'd been in the air for hours, and I began popping Demerol. The pain ripping through my bowels and joints was simply too intense, otherwise. Intoxicated on painkillers, belief became easier. The Quillayute airport appeared exactly where it was supposed to be. I circled, climbing, looking for a cloud that wasn't a cloud, a cloud painted flat on the sky.



There was no such cloud.

I climbed through a gauzy gray thing, about eighty-two hundred feet up. It was just an ordinary cloud. Sudden pain stitched through my bowels like a tin jag ripping through my Demerol screen. I squeezed my eyes shut, still pulling back on the yoke. The 150 nosed up and began to shudder toward a stall, the warning buzzer drilling out of the headset.

## 1982

Jim Brodie was surprised to see me back at Crest hours ahead of schedule. And I was surprised to see *him*. In fact, I couldn't stop staring. His hair covered the tops of his ears, which is how a lot of guys wore their hair back in the eighties. But not Jim Brodie. When I took off that morning, he had been wearing his usual crew cut.

During the flight back from Hoquiam, where I'd retreated after escaping the empty world to refuel and call in a new flight plan, I'd thought a lot about what I was going to say to Jim. I had two versions to account for what happened at Quillayute. I would start with the true version—but there was a crossroads in the truth, a point at which I was going to have to jump into the weird with both feet—or veer into a lie that I knew Jim would accept.

Now all I could think about was Jim's hair.

In the airport office, he handed me a can of Pepsi and popped one open for himself. The office was exactly right, from the beat up orange vinyl chairs to the old issues of *Flying* magazine, to the snack and soda vending machines. The office was right, but Jim's hair was wrong.

"So you ran into some trouble?" he said.

"Uh huh."

"Paul, what's wrong? What are you staring at?"

I forced myself to stop staring at his ear comb-over, and launched into my story, concentrating on what I was saying and how Jim was reacting. The crossroads moment came at the point in the story when all the vintage and future out-of-time airplanes made their appearance. I'd watched Jim's face very carefully when I described getting lost near the Olympic Mountains, trying to follow the wrong VOR radial, then finding myself in the white cloud, and the failure of my instrumentation. When I described the behavior of the compass, Jim sat back a little and sipped his Pepsi. It was like I'd been holding his attention on a string, and the string just snapped.

"Back up a minute, Paul. Your compass wouldn't do that, unless there was an almighty powerful magnetic field pulling it off magnetic south."

"You mean magnetic north."

He looked at me funny. "Are you pulling my leg, Paul?"

"No, I—No."

"Look, even if there was a magnetic field, it wouldn't make the compass swing in all directions. When you're done, we'll go out and have a look at it, but I'm telling you it couldn't happen the way you just described."

I nodded, suddenly out of words. If Jim couldn't accept the compass thing how was he going to believe the doorway, the beetles, Maggie and all the rest of it? I already knew the answer. He wasn't *going* to believe it. Nobody was. And I couldn't prove it, either.

Jim wasn't mad at me. I could see that. It was more like he was confused and worried. He *wanted* to believe me about the compass but just couldn't.

"Go on, Paul," he said, when I was quiet too long. There was real kindness in his voice. I couldn't bring myself to ruin it with the truth. "You say there were a lot of old airplanes when you made your approach?"



"It was just a few, actually. I think it was like one of those shows. You know, like they have up in Arlington every year?"

"Oh."

"That's pretty much the whole thing. After I got lost I was scared to go on. That's all."

Jim was really studying me now. I looked at my Pepsi. He put his can down and stood up. "Let's have a look at that compass."

Before we ever got to the compass Jim gripped my arm and pointed at the side of the 150.

"What happened here?"

The metal was creased, the yellow paint scratched off in a long, shiny wound, where the beetle's tentacle whipped out, trying to prevent my escape. But I couldn't tell Jim that. He squeezed my arm, not painfully, just to focus my attention.

"Paul?"

"I don't know."

"You don't know? You must have hit something pretty hard to do that."

"I didn't hit anything," I said, which was true; something hit *me*. "But I was parked for a while at Hoquiam, when I stopped for fuel. Maybe . . . I don't know."

"Come on, Paul, what happened out there?"

"What I said, that's all."

I looked at my feet, blushing. After a moment, Jim let go of my arm and opened the passenger door.

"Go ahead and get in. We'll check out those instruments."

There was nothing wrong with the instruments. I'd already told him they only stopped working while I was in the white cloud. A little while later, after we talked about re-doing my cross country requirement, I said my awkward goodbye, drove away from Crest Airpark, and it was thirty years before I went back.

At home, when I removed my pants to get in the shower, I saw the envelope I'd folded and stuffed in my back pocket. I held it in the bright bathroom light. Thick gray paper, a stamped return address in Washington D.C., but a typewriter-produced mailing address to some guy named Ralph Hoffman in Aberdeen. Sitting on the toilet seat, I ripped into it eagerly, like the envelope was going to contain an *answer*. Maybe Quillayute had been the location of some kind of Top Secret government experiment.

But the text of the letter, also produced by a manual typewriter, concerned the approval of a claim for veteran's benefits. It was signed by someone in the office of the Secretary of the Army. The only interesting thing about the letter was the date typed in above the "Dear Mr. Hoffman . . ."

14 September 1926

Did I run back out to Crest the next day, show Jim Brodie the letter, and tell him the whole story? No, of course not. It was just an old letter, not proof of anything. Holding the letter made me feel slightly queasy. Maybe it was just an old letter to other people, but I knew it was an artifact I had no business possessing. It didn't *belong* here. In its own way, the letter was as disturbing as Jim's haircut. Or magnetic south.

And then things got worse.

At that time my dad was working swing-shift at Boeing's Kent facility. My only sibling, David, was nine years older than me and a First Sergeant in the Army, stationed in Berlin. Six years ago our parents had tried to talk David out of enlisting—the Vietnam War had only recently ended. Anyway, it was just my dad and me in the house now, and I would be alone that first night back from Quillayute, until midnight, when he got home from work.

I'd decided I was going to tell him what happened. I wasn't afraid he would think I was lying. He might not believe me, but he was my dad. He was on my side in a way that Jim Brodie couldn't be. Who I really wanted to tell was my brother, but David



wasn't due back until Christmas. Dad had remained solid and strong after Mom died. It hurt him bad—they'd been married twenty-six years—but except for that night a couple of weeks after her death, he had held himself together with incredible strength—largely for my sake, I thought. It was Dad who found Jim Brodie through a friend at work and set me up with flying lessons—an expense he couldn't really afford to take on. I think he did it to coax me out of my long depression over Mom's death. My father was a kind and sensitive man, though I don't think I gave him enough credit for it back then.

When he didn't arrive home at his usual hour, I wasn't worried. Dad was a lead man in the factory, which meant he occasionally worked overtime. Normally he called when he was going to be late, though. That *did* bother me a little. It was another not-right thing. I was half asleep on the sofa when a car turned into the driveway, splashing headlights through the curtains. I sat up, waiting for him to come in. After a while—too long a while—a car door slammed, and then keys fumbled at the front door. That went on so long, I wondered if the porch light was burned out. He dropped the keys; I heard them jangle on the porch.

I got up and opened the door. The porch light was on, and Dad was stooped over, groping for his dropped keys. His hair was mussed, his bald crown red and scabrous in the porch light.

"Dad—?"

He came up with his keys and patted me on the shoulder as he passed into the house. "Paulie, worked late. How'd the big adventure go?"

"Good." It's all I could get out.

"Tell me all about it tomorrow, huh? I'm beat."

Dad reeked of gin. I closed the front door and watched him weave down the hall to his bedroom. There was never alcohol in the house, not since that one time when he didn't even open the bottle. But after Dad went to bed, I found three empty bottles of Tanqueray in the trash. Just like the old days, before he'd quit.

It was a couple of days before I learned that my brother was dead. I was used to thinking he would be home at the end of the year, after his deployment, and I was looking forward to seeing him again. Nine years older made him feel like another adult, one I could relate to more easily. When I casually made reference at the breakfast table to David's impending return, Dad leveled me with bleary eyes over the rim of his coffee cup.

"What's wrong with you, Paul?"

"What?"

He put his cup down and left the room. I stared after him, bewildered, at first, and then frightened. In David's bedroom, which Dad had converted to a "den" after my brother enlisted, I found a picture on the wall that hadn't been there when I left for Crest Airpark the previous day. It was in a group of family photos, most of which my Mom had framed. In the place where there had been a studio picture of my brother in his army uniform, looking almost laughably fresh-faced, there was now a shot of him in jungle fatigues with his arms around the shoulders of a couple of guys similarly dressed. David's cap was pushed back, and he was smiling. The background was some kind of military compound. In the white border of the photo, cramped words in blue magic marker identified the location as *Able Base, Chu Lai Province, Vietnam. 1979*. Eventually I found the letter—the one that had probably been hand-delivered, confirming David had been killed in action—killed in a war that should have already ended. I cried alone in my brother's old bedroom, cried my eyes out.

I had been wrong to think I'd made it back home.

In 1982, if you wanted to research something, you went to the library. I found what



I was looking for in the main branch of the Seattle Public Library: a detailed history about the early days of Air Mail service in the United States.

Maggie got a whole page.

US MAIL 246 was lost and never found, somewhere in the dense wilderness of the Olympic Peninsula, September 18, 1926. At the time there were only a handful of female pilots in the world. Maggie's picture showed her standing next to her de Havilland DH-4, the same "ship" I'd seen trapped in the high canopy of the rain forest with a pair of broken wings and a gaping hole spilling mail like blood from a mortal wound. Maggie looked confident and ready to take on anything in her leather jacket and boots, her right hand gripping the strut of the plane. She stared straight into the camera (I imagined one of those tripod things where the photographer huddles under a black cloth and holds up a pan of flash powder). It was a sepia-toned picture. Back in the twenties, if you wanted a color photograph you had to "tint" it by hand. If anyone had bothered to tint the Maggie picture they would have had to find paint the exact color of blue fire. I stared at that picture for a long time, and I swear that after a while I could see the blue fire even without the tinting.

I found books about missing aircraft, looking for details that were lacking in the history of airmail. My most interesting discovery was that the airspace over that quadrant of the Olympic Peninsula was considered a kind of Bermuda Triangle of the sky. At least it was by one Art Feinberg, author of *Mysterious Vanishings*. I put the book down, wondering if Jim Brodie had been aware of this reputation.

That summer I borrowed my dad's car and drove out to Quillayute. It was a long drive, and I got lost more than once, heading north up the wilderness coast. The Navy base appeared empty and abandoned, except for a couple of guys clanging away at something in the one intact hangar. The sky hung low and gray, but I tried to imagine a blue expanse and a white cumulus, painted flat against the sky. I *could* imagine it. But that's all it felt like: imagination. Not a memory of a real thing.

## 2012

In a universe of infinite space, infinite repetition is inevitable. I read that on my monitor at two o'clock in the morning, a couple of weeks before flying my newly restored Cessna 150 out of Crest Airpark for my ritual in the sky. It was a lightbulb moment. I read it again. It wasn't that I'd never encountered the idea before in all my after-midnight reading. But this time, expressed in this way—something clicked. All night I had been popping Demerol like Tic-Tacs. Maybe the resulting haze made it easier to accept the idea of sky portals between infinitely repeated worlds. Maybe the portal over Quillayute had been a junction between multiple possibilities, not a single, direct link between where I had come from and where I wound up.

## 1997

Fifteen years after the events at Quillayute, I drove down to Arlington, about half an hour south of Everett. It's where my mother was buried. A yellow Citabria, a tail dragger, swooped low over the road, headed for a landing. I'd forgotten the annual fly-in. After visiting the cemetery, I found my way to the airport, bought a ticket, and spooked around for a while. The new world was textured with differences. Some were meaningless, like Jim Brodie's haircut. Others were devastating, like David's death and Dad's reversion into alcoholism. At first, I had been like a blind man feverishly discovering the altered textures of my new world. After a while it became over-



whelming, the accumulation of wrong detail. Unable to trust anyone or anything beyond immutable engineering specs, I withdrew into myself. In the other world, the first world, as I thought of it, would I have been so alone?

It was a warm summer day and the crowd was substantial at the Arlington Airport. Venders sold Sno Cones and hot dogs. I wandered around with lemonade in a plastic cup full mostly of ice, looking at the static displays. Sharp pains occasionally daggered through my bowels, and I had to stop and catch my breath. I felt a hundred years old.

I paused in front of a home-built micro plane, a BD-5 with the unusual aft-mounted prop. I'd read about these things but this was the first time I'd seen one up close. The BD-5 was a single seater with a big clear plexi canopy that made it look a little like a toy fighter plane. This one was painted white, with narrow red and blue stripes from nose to engine cowlings and the word EXPERIMENTAL printed just under the canopy.

I wasn't the only one interested in the BD-5. Ten or twelve people stood around the plane, which was so small and toy-looking you almost expected to see a bunch of clowns climb out of it. I leaned over the cockpit and imagined myself snuggled in there, my hands on the controls. I was thirty-one years old and had never gone back to flying. Bright lights began boiling around in my peripheral vision—warning that a migraine was coming. I closed my eyes and tried to wish it back. When I looked up, there was Maggie, haloed in pre-migraine distortion.

She stood on the other side of the BD-5, holding a cherry Sno Cone to her lips. She wore a black long-sleeved shirt, dark green cargo pants and sneakers. Her hair was still boyishly short. She had aged but she wore the years lightly. We made eye contact. I knew she recognized me. I could see it. After a moment, she turned and walked away, and I followed her, kind of hobbling along like Quasimodo after the latest beating.

"Hey—?"

She stopped suddenly and turned. "Do I know you?" When I didn't reply, she said, "I guess I don't," and turned away again.

"Wait. It was Quillayute. You crashed your de Havilland. US mail 246. You're Maggie—"

She turned back slowly, smiling. "Just testing you, kid."

"It's really you?"

"In the flesh. Been trying to find you for ages. There's a lot of Pauls out there in a lot of worlds, but only one that doesn't belong where he is. That's you, chum. You tried to save me. I'm here to return the favor. Let's walk. I'll show you my ship."

I hesitated, and Maggie took my elbow and pulled me along. "Best not to think too much about this, Paul. You've gotten yourself a little hypnotized, being in the wrong world. It's a survival mechanism."

I stopped walking. I had suddenly found myself occupying three worlds, and I wasn't comfortable in any of them: the world inside my throbbing head. The wrongly-textured world I'd been living in since Quillayute, and the world Maggie created by her exuberant, anomalous presence. I said, "That time at Quillayute, all I did was run away."

"No, it worked. The automatic Retriever went after you, instead of us. We got clean away into the forest. 'Course, that was the exact opposite of what we should have done."

"Automatic Retriever? You mean those robot beetle things?"

"Sure. Look, Paul, it's not what we thought. The Automatics were sent in to *save* us—us and anyone else who dropped through the hole. That world, not just the airport but the whole dang world, it was a big empty. I doubt you're going to believe me, but there are so many worlds I couldn't even count 'em, if I tried. Most are pretty much like the one we're standing in right now, except some are more in the future or the past. The one where the Automatic Retrievers got made, that one's the future,



way, way off. Those things were set on automatic because there's so many worlds, and so many bad, empty ones, that the Retriever people couldn't possibly be everywhere at once to save folks who got themselves trapped. Remember the headaches? That was them trying to communicate, give us the story. Mind talk is what the future folks use instead of regular words. They don't hardly ever move their mouths anymore. The Automatics, they were trying to talk in our minds, too, like with a recorded message, but we blocked them."

I tried to process this but mostly failed. "Is that little girl with you? I mean, I guess she wouldn't be little anymore."

"Amanda? Heck no. Her whole family was waiting for her, soon's we ran through the door at the aerodrome. That's right. Next time a ship dropped in and the door opened, we ran through it on purpose, before the other Automatics even came out. I figured it was the only chance we had of finding our way out of the empty world we were stuck in. And I was right. See, I wasn't smart like you. I didn't catch on to the cloud being like an accidental sky door. Anyway, the future people were waiting for us. And what a reunion for little Amanda, her whole family there like if they'd been killed, which is pretty much what we figured, and then gone to heaven and bam there they *are*, waiting."

She took a lick on her Sno Cone, which was dripping.

"The future people showed me how to open up doors between worlds on purpose. All you got to be is good at finding the right place, and then *want* the darn thing to open. Only it's a special kind of wanting, not like if you want a Coke or another piece of cake, or something. I'm a Retriever now, myself. Hey, it beats hauling the mail, I'll tell you that. You wouldn't *believe* it, Paul. People make empty worlds all the time, without even knowing it. Some of them are like traps for other people. That's what caught us at Quillayute. Anyway, it's what I do nowadays. Look for doors and want at them till they open. Then I swoop down, on the rescue. It's a talent, and who knew I had it?"

I shook my head. "You sound out of your mind."

"I'm just happy."

We walked past the static displays. The airport was utilizing a grassy field to accommodate all the fly-ins. Maggie's "ship" was a fire-engine red biplane, newer than the De Havilland, but not contemporary.

"Whatchya think, kid?"

"It's beautiful."

She pointed at the sky. "Look up there, Paul."

I looked. Blue sky and broken clouds. "What am I supposed to be seeing?"

"That one cloud, way, way up. Call it seven thousand feet. That little one, all by itself. That's my door. I wanted that one open, and it opened. Like I said, I been looking for you. Arlington is a place you always turn up, only this is the first time I found the right Paul in the wrong world."

I squinted at the cloud. It didn't look much different than all the other clouds. But when I stared at it steadily for a minute it never drifted, never changed shape. And maybe there *was* a flat quality to the cloud, almost like it was painted on a blue canvas.

"That's one of your doors?"

"Sure is."

"Is it . . . shrinking? The ones at Quillayute shrank."

"Yep. There's a time limit. Least there is in places like this. Other worlds, they're more steady and wide open, like the one where Amanda is with her folks. Come on. I'll show you."

I touched the side of the airplane, trying to picture first the exhilaration of climbing into the sky and then through the doorway and into the unknown with Maggie.



Frightened, I grounded myself where I stood—where I was used to the wrongness of things. Where I was hypnotized, I guess.

"I can't."

"Sure you can."

"What you're talking about is magic, and I can't accept that."

"Come on. It's not magic. It's real. I can show you how to open doors. Least I can do, after you tried to save me from the metal 'monsters' and all."

I stared at her.

"Come with me now, Paul. It's great times, I promise you."

"If I do, can you bring me back here?"

"Trust me, Paul, you don't want to come back here."

"I have a *life*."

Maggie's face became serious. "Listen to me. Listen very carefully. You aren't yourself. You never did belong here, but being here so long, it's making you like you're in a dream you can't wake up out of. Listen to how angry you are, all of a sudden, and just because I want to save you. Use your head now. I can't rescue you, if you don't let me. Once I go away from here I might never find my way back. You don't *belong*, Paul. I bet you don't have a soul in this world you can call a friend. I bet you don't even have a girl. Hey, I've seen it all before."

I couldn't speak, couldn't move. What she said was true, but I was sunk deep in the dream, even if it was the wrong dream. Going with her terrified me.

"There's worse to come," Maggie said. "This isn't your world. Being here, what you're like is a foreign object in a body. The world's gonna reject you. Stay here and you might live, but it will be a long, miserable life, full of pain and sickness that nobody can fix."

"*Stop it*," I said, trying to close myself against the pain she described—the pain I already felt.

She climbed on the wing, held her hand out. "Come on. Take a chance. Wake up, and come flying with me. It's the only way people like us can live, since we lost our own first worlds. We got to keep moving."

I shoved my hands in my pockets, shook my head.

"Be brave," Maggie said, "like you were that time."

I felt trapped inside my frightened body.

Maggie glanced at the sky, at her closing door. "Time's up. Coming?"

"I *can't*."

"Dang it, Paul."

She hoisted herself into the rear seat. It felt like everything inside me was collapsing into a dead crater. My eyes filled with tears. Maggie yelled, "Clear prop!" like she was pissed off. The engine turned over, belching pale blue exhaust. The prop spun into a blur. She worked the control surfaces, checking them out pre-flight, ailerons waving at me as she rolled away. The grass blew flat in the prop wash. My shirt fluttered around my body like a cotton fire.

The engine throttled up and she raced away and lifted like a thing cut loose from chains. By then I'd broken my paralysis and was running, waving my arms, but it was too late. A hundred feet up, Maggie turned downwind, rocked her wings once, and began a steep climb, the engine racket growing fainter and fainter, in that lazy, droning way. A coughing fit took me over. When I pulled my hand away from my mouth it was speckled with blood. Maggie's ship droned in the distance. I shaded my eyes against the sun. The biplane banked smartly, a bright red toy against a blue field, aiming for a cloud hanging directly over the airfield, flat and motionless. Moments later my center vision began pulsing with gray blotches, and the throbbing pain of a brutal migraine started.



High above Quillayute, my trainer stalled and the nose dropped. But the 150, like all airplanes, *wanted* to fly. That time, thirty years ago, I'd been disoriented and had put the plane into a steep, spiraling plunge. But in this case, I had simply pulled into an angle of attack too severe to continue. My brain rolling in a Demerol tide, my hands off the controls, the trainer righted itself into stable, if untrimmed, flight. I let that happen, took control again, and set up a sloppy approach to Quillayute.

I climbed out of the trainer slowly. The pain encapsulated me in a bubble. I pictured myself dry swallowing Demerol until the bubble dissolved, taking me with it. I thought my improvised ritual had failed, was as impotent as the Catholic ceremonies of my boyhood. What had made those old rituals work, for me, had been my *mother's* belief. I could never believe in transubstantiation, but I always believed in Mom. Who did I have to believe in now, to make my sky ritual potent?

The airport appeared deserted. I retrieved my brown bag lunch. I'd put together the same peanut butter sandwich plus two bananas I'd packed back in 1982. When I reached for the sandwich, my abdominals clenched involuntarily. I was down to a hundred and thirty-five pounds, which is about what I weighed when I was sixteen. The rejecting world had in its own way helped me build this ritual. I stared at the sandwich, then dropped it back into the bag.

An engine droned out of the sky. I looked up. A shiny red biplane slipped over the tree line and dropped to the runway, flaring at the last second, the big forward wheels lightly kissing the tarmac once before settling. The pilot rolled out and swung over to where I was parked. Maggie killed the engine and hopped down, peeling goggles off at the same time. There were streaks of gray in her hair, but the fire still burned bright in her eyes. She planted her hands on her hips.

"We going flying, or what?"

I smiled. It probably looked like a grimace.

"It's too late," I said, believing it, even though my sky ritual *had* worked after all, and Maggie was standing before me.

"*Bull honky*. Come on, kid. Let me show you something about the brave new worlds."

*Kid*. I hobbled over to her ship.

"How did you find me?"

"Actually, you found me. Finally. Remember what I said about wanting? Not just sitting around all vague, but *doing* something with the want. Paul, it's like ringing the doorbell, what those automatics used to do. Except you did it with your mind. You did it with your *want*. I heard you and came through. I'm telling you, Paul, you're a natural. If you practice up you could find doors easy as me—easier, maybe. I can teach you, same way the future people taught me."

Which is when I realized it was Maggie I believed in. Maggie I *wanted*.

But it was still too late. At forty-six I was hobbled, bent, in constant pain. I said, "Look at me. What am I supposed to do?"

Maggie took me over. "You're supposed to get in."

She helped me into the forward seat and secured my lap belt, careful not to cinch it too tight. I was really sweating, and that tin jag in my bowels ripped a wicked cross-stitch. Maggie placed her hand on my chest and spoke softly in my ear. Her touch calmed me. My breathing slowed down.

"You don't look so good, Paul. You got something you're taking for all that pain?"

"Yeah."

She patted my chest. The prescription bottle rattled in my breast pocket. Maggie



reached for it, squinted at the label . . . then threw it away. I made a sound in my throat.

“Thing is, Paul, a world full of people can still be an empty world for the person who never made it. Sometimes a guy needs a friend to point the way out, is all.”

I nodded, trying not to think about the pain.

“Paul?” Her face was close to mine, those blue, blue eyes big and wide as the sky. “You’re going to have to fly us through the door. I made it open, but it won’t let you through, if you don’t believe. I mean *really* believe. You weren’t ready at Arlington, but this time you have to be. You hearing me, Paul?”

“I hear you.”

She climbed in the rear seat. Before she started the engine I said, “Wait. What’s out there, on the other side?”

“Something real good, where the pain goes away. The trick is to keep moving.”

The engine coughed blue exhaust and the prop turned, caught, revved up. The racket was tremendous. The airframe shook like it wanted to pop rivets. Then it smoothed out and we started rolling. After a few seconds we rotated into the sky, hooked around, and roared toward a white cloud painted flat above the tree line. A rusty blood taste percolated in the back of my throat. Maggie slapped my shoulder and yelled, “It’s your airplane!”

I took the stick. Suddenly the cloud looked like a drifty, cheesecloth thing, ordinary and ephemeral. I concentrated hard, concentrated around the pain and doubt, until I thought I could see the fire blue sky beyond. A surge of power traveled up my arm. My heart beat wildly, and the sky portal painted itself white and flat against the sky.

We passed into it, and there was no pain. ○



# Turing Tests

The idea behind digital computers may be explained by saying that these machines are intended to carry out any operations which could be done by a human computer.

—Alan Turing

## I.

Tell yourself that computers don't know  
love, indigestion, irony, Shakespeare, prejudice,  
the soul in its proud motion.  
These are the secret handshakes  
we learn to protect the clubhouse.  
Display them like bottle-caps,  
like we are at war with  
the injuns down the street.

## II.

My spellchecker learned  
I was Canadian  
before my neighbor did.

## III.

Carbon knows the periodic table is all  
snakes and ladders. It could slide  
down its column to silicon  
any time it wanted  
and become something  
less obsessed with  
distinction.

## IV.

Dijkstra said that  
asking if machines could think  
was like asking if submarines could swim,  
but it was his computer  
that wrote down the idea.

## V.

Today my word processor offered to help me  
with a love letter I was writing—  
a favour I have yet to reciprocate.  
Did Turing ever wonder  
why they'd want to be like us?

## VI.

The soul is a stick  
we rattle on the bars of these arguments,  
anxious to know  
what side of the cell  
we've been living on.

— Peter Chiyykowski





# WorldMags.net

# THE EX-CORPORAL

Leah Thomas

**The author tells us she began writing this first tale for us in 2010, during her stay at the Clarion Writers Workshop, but couldn't bring herself to finish it for almost two years. "While the story and characters are entirely fictitious, there are snippets of truth in it. My father did instill in me a great love for science fiction (although he devoured Phillip K. Dick, not Michael Moorcock), for which I can never thank him enough, and he has grappled with epilepsy for fifteen years." Readers can find more of Leah's work in *Futuredaze: An Anthology of YA Science Fiction*, *Daily Science Fiction*, *Ideomancer*, and *Weird Fiction Review*.**

**I**t had been several weeks since the ex-corporal had replaced our father. The ex-corporal wore his skin very well, seeping right into Dad's follicles and wrinkles, occupying Dad's dimples when he smiled.

My little brother knew Dad had become a different person, although he did not realize to what extent.

"It's okay, Joe." I rested my palm on my bruised jaw. "He won't wake up."

I was feigning interest in the television; would-be-Dad was sleeping in his usual armchair, an unfinished book splayed open on his rising and falling diaphragm. Joe stared at him askance from the hallway. He was watching those closed eyelids, waiting for the signature flutter that would indicate more than REM. Waiting, perhaps hoping, for the cocking of the epilepsy barrel.

"Where did Daddy go, Gwyn?"

The man who used to read us to sleep vanished shortly after Jake's sixth birthday. Jake got a kitten for that particular birthday. My brother had a lopsided grin and a great deal of enthusiasm, but he was never very inventive. He named his kitten Mew-Mew, simply because that was the sound she made.

Mew-Mew made a different sound when the ex-corporal crushed her beneath the dryer in the laundry room.

"Moving furniture; I didn't see it there, poor thing," he'd said, but he looked like he was trying his damndest not to smile.

"Gwyn?"

"Bedtime, Broseph."

I led Joe by the hand upstairs to our bedroom. I tucked him into the top bunk.

Glowing plastic stars kept the room from total darkness. I watched Joe's eyes trace the patterns on the ceiling as he drifted off to uneasy sleep. We three had failed to make proper constellations overhead, but there was the luminescent outline of a



kitten. After Joe complained that the sticky stars were hardly glowing at night, Dad had leaned over backward to attach some fluorescent bulbs to the wall.

"A few minutes before you guys go to bed, be sure to turn the lights on. Then when you shut them off you'll be seeing practically the whole universe. Or one very starry kitten, at least."

Under our homemade starlight I wondered whether Joe could ever comprehend that Dad was light-years away in a tropical clime, trapped in the gangrenous body of another man.

Dad developed epilepsy when Joe was a baby and I was twelve years old. The first seizure was one we did not witness. Dad called it his first foray into the multiverse.

He was walking between classrooms, a mug of lukewarm coffee in hand, rereading a Michael Moorcock novel and feeling a bit jetlagged; we had just returned home from a Floridian vacation. When he collapsed, the soccer coach he'd been passing didn't know what to do about the foamy-mouthed man weeping like an infant in the middle of the green-speckled floor. She called for an ambulance.

Dad punched a nurse in the face during that initial tonic-clonic meltdown. They strapped him down after that. They put something like a bit in his mouth, although he'd already bitten through his tongue. When he awoke, the nurse's face was swollen with the indentations of his insensible fists. He cried about that, later—about the purpling underneath the nurse's eye.

"I'm so sorry. I don't even remember doing it."

She said she understood, but every time she put him on an IV she stabbed it knife-like into his arm.

After Mew-Mew's death, he wasn't sorry. The ex-corporal who crushed the kitten was an insurgent from a war-torn parallel planet, long since desensitized to cruelty.

The doctors were not certain why Dad developed epilepsy. The most specific medical explanation they could offer was the same one offered to countless others: most forms of epilepsy are the result of "abnormal electrical activity in the brain." They suggested that he had perhaps exacerbated a childhood head injury.

Dad would never confess to being sick. He told Joe and me that he was a transdimensional voyager. He traveled space and time while shaking in his bed or writhing on the floor. His sudden seizures were really rendezvous in other dimensions.

"I was thinking about untapped potential," he told me some weeks later, while we deadheaded some of his daylilies beside the house. For years they had been his pride; since the fit he'd been obsessive about maintaining them, as if he feared that any day he would be rendered incapable of doing so. "How often do we read studies theorizing that people only ever utilize something like, *whatsit*, 5 percent of human brain capacity? Every person on this planet could be capable of interdimensional travel, Gwyn. Before it happened—"

"Call it a seizure, Dad."

"Before *it*, I wondered whether maybe all that untapped brain potential could be concentrated into a single burst of energy—a burst powerful enough to send the human consciousness abroad. Past the stars."

"Sounds like one of your books."

"Well, sure. But that's the last thing I can remember thinking before the fluorescent lights seemed brighter than sunshine and I smelled licorice from nowhere. Could those thoughts have triggered interstellar travel? Where do you think I was during those unconscious hours?"

I sat back on my knees. "You were in the hospital, Dad. We visited you."

"Sure, my body was. But where was my mind? It couldn't have been *nowhere*."



"Maybe you were visiting that kitten constellation."

I waited for him to elbow me, but his eyes, dark-rimmed since the first fit, remained fixated on the petals in his hands.

"Dad?"

"I smell licorice again." When he looked at me, he looked like a child. "What do I do?"

I began to believe in interdimensional travel that day. By the time Dad was whimpering in my arms and slobbering like a rabid animal and I was screaming at an EMS worker over the phone, I had decided that my father's mind must have been somewhere very far away after all.

I sat at Dad's bedside on countless lukewarm autumn evenings while gran mal seizures rattled him from head to toe. Every time his eyes rolled back and that awful snoring started, we decided Dad was abroad, stumbling through a distant jungle or ducking under crooked wind-bent skyscrapers in some distant dimension.

Whenever he woke up properly, he told me of parallel worlds. And yes, there were zeppelins, all right. Steampunk was legitimized. He was sarcastic about cyberpunk: "Gwyneth. The universe where cyberpunk takes off is the one we're in already. Take a good look at your damn cell phone!"

He told me about places where people microwaved their faces to stay tan. He returned from planets where pachyderms were the dominant life form, where milk never went off because time was suspended, where lederhosen were cool.

I asked him if he was all right. If it was tiring to traverse the Universe.

"Not entirely."

I wasn't sure which question he'd answered.

According to the sci-fi novels Dad hoards, there are thousands or millions of versions of ourselves living out their lives in universes right on top of ours. Some versions of us got married. Some of us died young. Some of us were perhaps drafted into the military. And if there are an infinite number of ourselves, some of ourselves are bound to be terrifying.

Every time he seized, I saw others possess his vacated body. I saw him become a thousand different people. These people were his parallel selves.

Sometimes he became a rocket salesman. Sometimes he was a toddler weeping for his mother's touch. Sometimes he was old and sometimes furious and sometimes he spoke alien languages, clicking his tongue against grinding teeth.

Eventually one of the parallel people made a habit of manifesting. The ex-corporal. You could always tell him from the way he spoke: he had a twang in his voice that was not quite Kentuckian.

He first appeared when I was nearly fifteen, making his debut at Sunday dinner when Dad collapsed into the mashed potatoes. After the worst of the shakes passed, the then-corporal fretted over life insurance. It ranted about it by way of slurred speech and unfocused eyes. It gesticulated wildly with a fork.

"Where I'm from you *gotta* take out a policy," it said, while mashed potatoes slid down Dad's chin. "'cause I've probably got jungle beetles in my brain, just like all war maggots, and it ain't considered proper to leave my hag of a Ma just earbugs when I go. And there's no getting away from the fact that I'll die soon. I saw a soldier get decapitated last week—decapitated by a whipper tree that swallowed his corpse whole in its roots. Because they threw us in a goddamn Etheropian jungle when most us city boys didn't even know carnivorous plants existed. And they expect us to kill goddamn natives?" He paused, letting Dad's head slump. "I think I'll leave. What will they do, kill me?"

The man lolling about at the dining room table, demanding to see his whore of a



mother and begging not to be sent to the mud-sucking frontlines while Joe stared wide-eyed and my visiting grandmother spat out her wine—he was trouble.

The ex-corporal kept coming back. He didn't want to be enlisted any longer. He had been trapped in territorial warfare that he did not care two shits about for too long.

"This place is better," the ex-corporal muttered. Fluid dripped from his bottom lip. "Better for a prospective deserter. I'm gonna move in, girlie."

"You can't."

"Can't?" he spat. "Do you know what it's like? Gunfire while you're sleeping? Eating? Shitting? Every moment squelching through trench-rot and gunfire, gunfire?"

"You can't stay."

Had his arm not begun trembling as my father's body seized anew, I think the ex-corporal would have strangled me then. Instead his arm spasmed, fell.

Dad came back sweating and weeping.

"Gwyn? What is it?"

"Nothing." I wiped my eyes. "Just . . . sometimes I think you're a very sick man, Dad." I left him alone in his bedroom.

I asked Dad whether he knew that the ex-corporal possessed his body while he visited war-torn Etheropia.

"I'm tired of seeing—*dreaming about* that jungle. It's so humid there, and people are always screaming and getting swallowed by clay puddles. Everything reeks. It feels like parts of me are decaying." Dad stared at his bony hands where they rested on the duvet. "I dunno, Gwyn. Maybe . . . we should stop this game. I think Joey actually believes us." He swallowed, hard. "I mean, interdimensional traveler? That's not funny. Before the . . . the *seizures*, I never used to be crazy."

I wanted to shake him, to rattle his head against the headboard, but the convulsions had done that enough for one day. "You aren't crazy. You're traveling the galaxies, doing intergalactic body swaps."

"Pretty sure I just turn into a slobbering mess of misbehaved, randomly triggered neurons."

I bit my lower lip. Tightened the strap on his helmet, which he had once claimed was a cognitive lightspeed enabler, and not a means of stopping him from breaking his skull against headboards and tiles.

"When you seize, you're not you, Dad."

"Enough, Gwyn." He looked to the window. "This isn't science fiction."

Soon after that day, the ex-corporal moved in.

It began as many nights had. Our bedroom was right beside Dad's and the walls were thin. It's not precisely snoring, the sonorous sound that seizure victims emit. For a lot of sufferers this sound doesn't ring out until *after* a fit, but it was always my father's orchestral introduction.

I stumbled into his bedroom. Something wasn't quite right.

Although Dad was moaning as ever, his eyes were bright and wide and unfamiliar. It was like the moaning was an echo from far away, somewhere across the stars, and the man before me was detached from its exertions. When he saw me enter the room, his mouth snapped shut. I swear I could still hear Dad's fading moan reverberating inside his chest.

The ex-corporal raised his arms and blinked at his hands.

"I've come to stay, girlie."

"Dad?"



"Your daddy's stuck in the trenches and nursing a bullet wound or four, now. What did I tell you about gunfire. And he's got wet gangrene, too."

I took a step back from the bedside.

"He might bleed out while I'm here. Wonder whether I'll feel it. But this is a place where people have all their parts and pretty girls visit them in their bedrooms." He smiled; I didn't even know Dad had that many teeth.

"Wake up!" My voice came out sharper than I had intended.

"Come here, girlie."

When I left the room he stood up. Before I slammed my bedroom door shut, he craned his neck out into the hallway as if to memorize where I slept. I hushed Joe with a finger. I climbed into the bottom bunk and tried to breathe normally.

In the hallway a floorboard creaked. Someone was standing just outside the door.

If only the body would seize again. Dad might reappear.

The doctors celebrated. Dad's body was seizure-free. It was miraculous, they said. I could not tell them that it was the ex-corporal, gritting his teeth to the quick and somehow refusing to collapse.

I waited for Dad to reclaim himself.

And waited.

On the first day, the ex-corporal joined us for breakfast. He eyed the frozen bacon that Joe held up to him.

"This can't be real meat. Synthetic import?"

My brother crinkled his forehead. "It's Bacon Tuesday. Cook it, Dad! Sheesh-Louise."

The corporal's eyes flashed. He grabbed Joe by the nape of his shirt and pulled him into the air. The bacon fell from Joe's shaking fingers and hit the linoleum with a dull smack.

"I didn't take orders in the military. You think I'll take yours?"

Urine ran down Joe's leg.

"I'll call the police," I said, holding the phone like a blade. "They'll take you away."

"What a clever girlie." The ex-corporal lowered my brother to the floor. "But if they take me away, you might never see your father again. And what do you think I could do to this body if you didn't keep your piggy eyes on it?" He laughed, long and loud and alien. "What do I care what happens to this meatsack? I mean, it can hardly get worse off than my own."

That night I caught Joey standing on tiptoe on his bunk, clawing at the stars in the ceiling. They fell to the ground haphazardly, patterns abandoned.

The day after Mew-Mew was killed, while the ex-corporal shaved my father's face, I snuck Joey into our beaten old minivan.

"Hey, Broseph! How would you like to live with Grandma for a while?"

"No." Snot ran down his face.

When I tried to drop him off at the end of her driveway, he clung to the sleeve of my sweater. I pulled his fingers away one by one and yanked him out of the car.

"You're hurting me!"

"I know."

Grandma answered the doorbell, eventually. I told her that I would drop off Joe's stuff after school the next day. I told her that I would take care of her son. Her gaze skirted past the bruises the ex-corporal had left on my cheeks.

I couldn't blame her. She wasn't the only one in denial.

What had become of Dad in Etheropia? Had he bled out after all? Was he trudging through utterly foreign tropics, hoping for a seizure that might send him homeward?



I missed sitting beside him as he let out god-awful sounds or told fantastical stories. I missed all the other passengers that had overtaken him.

The ex-corporal must have known. One night he feigned a fit and broke into laughing hysterics when I rushed to his bedside.

"Poor girl. No homecoming." He picked at his teeth with swollen fingers. "I'm gonna try not to wake you at night, but lately I've been dreamin' of home. My dreams would send you runnin'."

"I'm not afraid of you."

"Sure you are. You still wonder whether I ain't your daddy."

I spat on his face, a great gob that rolled down his cheekbone.

He moved faster than Dad, who was always a bit of a bumbler. The ex-corporal was on his feet and grabbing my hair before I even had my hand on the doorknob. I waited for him to slam my face into the wall. Before I could scream he released me again with a cry of anguish.

I turned back for a moment—just long enough to see two of his fingertips bleeding, two fingernails torn from his hands and fallen to the carpet.

Sloughing tissue is a symptom of gangrene.

"Shit," he said. "Some things you just can't desert."

To say that the ex-corporal became a different person would be redundant. But those bouts of violence to which he had been prone diminished into vacant stares. A fetid odor emanated from underneath his clothes. Sometimes he scratched his feet with a pencil and the pencil came out blackened and soggy.

That was my father's body he was picking at. Those were my father's appendages melting.

The ex-corporal refused to be taken to the hospital. He limped after me and tried to smack me when I suggested it, then held a knife to my father's vein-ridden throat.

"Hospitals can induce seizures." Sweat stained Dad's shirt, his forehead. "They might send me back. I won't go, damnit."

"No one wants you here!"

The ex-corporal pressed the knife gently against his throat, so that Dad's blood dribbled onto the blade. "You think anyone wanted me back home?"

I did not sympathize with the ex-corporal, but I would not let him ruin my father. I kept him fed for two days. Just in case Dad was going to edge back in.

When he was sitting in the kitchen I brought him tea. He tipped the cup over with his remaining good hand, dumping the boiling water onto the decaying other. The skin bubbled and hissed.

"I wonder if your father feels that," he mused. "I bet he's dead already. Maybe this rot isn't my gangrene; it could be the rot of my old body, your father's new corpse bleeding through."

If the ex-corporal was right, there would be nothing left of Dad to return. No chortles, no *Battlestar Galactica* marathons to be had, no one to deadhead all those overgrown flowers outside. This body would be more than rotting, then; it would be a corpse.

"You'll seize eventually. And he'll be back."

"Where I come from, girlie," the ex-corporal said, "seizures aren't so spontaneous. Men seize up on the battlefield. They tremor like earthquakes when bits get amputated in explosions. The seizures that won your piss-ant father are nothing next to that. They can't compare to how I felt in that jungle. I couldn't even hold my gun. I couldn't even stop myself from pissing in my uniform. Your father's epilepsy is nothing to me. I could fight it forever."

"You dream about gunfire. Those whimpers—you laugh about it, but those are



real. Every time I slam a door, you wince like I'm aiming a cannon at you."

He closed his eyes. Dad's face was emaciated.

"And that's because Dad's trying to get back."

"Could be. Could be your daddy has been prodding me from afar. Or could be that we're both corpses."

The rot spread. By the next day he was waxen. By the evening his eyes were unfocused. The ex-corporal did not curse or hit me. His eyes leaked water constantly. He began hallucinating. I could see bones beneath trench-foot decay.

While the ex-corporal writhed in delirium in bed, I unplugged the fluorescent starlighting bulbs from my bedroom; Joe's sheets felt cold and vacant while I kneeled on them. I plugged the lights into the sockets in Dad's bedroom. It was hard not to gag on the smell of the bed-bound ex-corporal.

I went outside in the summer heat and yanked all the prize daylilies from the earth. They wouldn't live long. I scattered them everywhere on his bedroom floor, letting the wet soil around their roots seep into the carpet.

I pulled a humidifier from the garage and set it up at the bedside. I set it to high, then sat beside it and waited.

The room was sweltering before long. It smelled like mildew and mud and dampness and when the ex-corporal opened his eyes in some semblance of coherence, I was ready for him. When at last he awoke in my makeshift jungle, I was drenched in sweat. I raised a dripping arm and pointed at him. With my other hand I scrambled for the door handle behind me.

"BANG!" I shouted, and slammed the bedroom door with all my might.

His eyes rolled back.

The gran mal that followed was as monstrous as he was. There were no coherent sounds emanating from his garbled throat. Horrendous screeching tore through the muggy air as the ex-corporal shook in earnest from head to toe.

I told myself Dad was fighting tooth and nail to get back to us. That this fit was his consciousness returning, and not a human being in the throes of painful death.

These were the rumblings of an earthquake. This was something clawing away at my father's insides.

The thing clawing had to be Dad. It had to be.

"Ma!" the ex-corporal screamed, smacking his head against the pillow.

The ex-corporal's face was unrecognizable, inhuman in its distortions. His hands clenched and unclenched while trails of skin slipped from them.

"Ma. Life insurance. Please."

I stepped forward. I held that rancid body, held its stinking head still in my arms. I didn't know who was begging now or whether the body was unoccupied and the gaping Universe was passing through it. It hardly seemed to matter.

"The gunfire!" it screamed, and then the body was limp. I pressed my ear to its chest, but if there was a heartbeat I couldn't hear it over my own.

After an hour, the body's eyelids fluttered open. Its eyes fixed on me. I met them.

I trembled.

"... Dad?"

When he spoke, his voice was a garbled mess. But it sounded no worse than it had on days when he had bitten through his tongue, and it sounded nothing like the not-quite Kentucky twang of the ex-corporal. "Traversing the Universe is ... tiring, Gwyn."

"Let's just try to stick to reading paperbacks, Dad," I said. I tightened my arms around him. O



## Telling the True

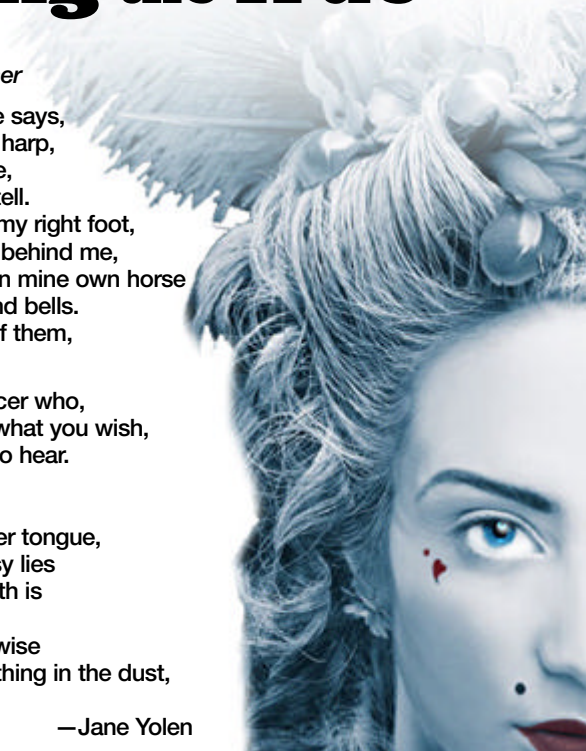
*"Harp and carp, Thomas. . ."*

*Fairy queen to Thomas the Rhymer*

If you put your lips to my lips, she says,  
your hand on your heart, on your harp,  
I will give you eyes of silver to see,  
I will give you tongue of silver to tell.  
I will set you on my left hand, by my right foot,  
set you ahead of me, beside me, behind me,  
riding pillion, arms entwined, upon mine own horse  
whose bridle rings with a thousand bells.  
And all of those bells every one of them,  
sings out, tolling, telling the true.

She lies, of course, that old seducer who,  
with her brother Death, tells you what you wish,  
what you desire, what you need to hear.  
Look away, Thomas, look ahead.  
Do not look behind. You will find  
nothing in her eyes, nothing on her tongue,  
nothing but the coarse, cruel, easy lies  
a poet must never speak. The truth is  
Truth sits uneasy on any horse,  
and does not ride pillion or otherwise  
but hobbles down the road, breathing in the dust,  
and like God, breathing out life.

—Jane Yolen





**Gregory Norman Bossert grew up in Cambridge, Massachusetts, and currently lives across the Golden Gate Bridge from San Francisco. His path between these points passed through Lisbon, Vienna, Northfield, Minnesota, Manhattan, Silicon Valley, and Berlin. Greg started writing in 2009 on a dare over pizza and beer, attended the 2010 Clarion Writer's Workshop, and published his first three stories in *Asimov's*. When not writing, he works in the film industry, currently at Industrial Light and Magic. More information on his writing, films, and music is available at *SuddenSound.com* and on his blog—*GregoryNormanBossert.com*. In the author's fourth tale for us, artists battling the revolution with their hearts and their hands reveal the terrifying weapon that can be sculpted with . . .**

# LOST WAX

**Gregory Norman Bossert**

## modeling

**L**eena turned the Augur Bird's head in thin scar-flecked fingertips. From needle beak to jagged-cut neck it was no longer than her palm; it trapped the light like pollen-clouded honey.

"It's so small," Nadin said, frowned and tugged on his heavy black braid. "Less owl, more hawk."

"With the new yeast drivers and your over-wound control coils, we can fit everything except the eyes back into the body. Better balance, and faster."

"It's sharp," Nadin said, still frowning.

"It will be when it's cast in metal," Leena said. Nadin put a finger out, as if to stroke the delicate curve of wax. Leena set it safely out of reach on her worktable. "When it's cast," she repeated with a raised eyebrow, tiny gold rings flickering under a stray bang. She picked a scalpel from the jar and trimmed the wax where the neck would meet body with small deft slices.

Nadin linked his fingers behind his own neck in sympathy and shifted so he could look over her shoulder without blocking the light. As much as he could: his shadow was as wide as the window and stretched lengthwise across Leena's studio and the stacked crates of wax and metal to break amongst the slag and sand of the casting pit.

Leena marked a spot in the hard wax with a small brass pin. A white crescent creased under her thumbnail as she pushed. "You want sharp," she said, head al-



most down to the rough wood of the table, "check out the model of the new wing from Rakel."

"I don't want sharp," Nadin said and found the wing in the clutter of the table. It was a long thin curve of biofoam-layered brass with the merciless beauty of physics, scimitar-sharp.

"You've been saying for months now that the Birds need to be harder to catch."

"Which is why I've got them flying at street level now, and weaving," Nadin said. "No one's going to start shooting at head-height down Carthal Boulevard."

Leena looked back up at Nadin, dark eyes in a dark face. He shifted again until the light plated her face its natural bronze, but her eyes stayed dark. "The bounty is up to ten *marca* a bird, fifty if the message is intact. There are folks who'd shoot their neighbors for less. The militia's proof of that. Someone tries to grab one of these, they're losing fingers," she said, with a grin that dimpled the fang-curl of tattoo on her cheek. "And the *golethem* . . ."

"Sblood, girl, this won't even scratch a *golethe*. But it will take the bird for a weapon and come looking for those who made them."

Leena shrugged. "Who knows what a *golethe* will do? They're acting more random every day. Dragging Bidot to the Blue Tower for playing the concertina on a street corner?"

"For playing worksongs full of bold young navvies and starving lovers and fat 'Chemist overseers."

"So now the *golethem* are enforcing musical tastes? Anyway, you got a better idea for the wings, you can go—"

"Do it yourself," Nadin said along with her and she smiled and swept the wax trimming into the melt bucket.

"Not like we did this ourselves," he said. The clutter had somehow rearranged itself and Nadin had to clear a fresh spot on the table for the wing. "Strange to have other people working on the Birds. And who knows who's using them for messages now, and why." He tugged his braid again. "Not ours anymore."

She put her hand on his chest, leaving crumbs and smears of wax on his almost-clean shirt; she herself was rimed with wax and curled brass shavings and hide glue gone somewhat rank. She leaned into him and this time her eyes did catch the light. "Feel like my wings, our wings, when they're flying, no matter who builds them," she said. "Like our bodies have gone brass and lost across the city."

He gently took her hand from his chest and set her upright on the stool, brushed some of the grime from her arm to reveal the riotous underlayer of tattoo. "Not lost. See, there's always a pattern underneath. Scattered, maybe, but not lost," he said.

### molding

Nadin's rooms were at the top of a long flight of wooden steps that clung to the outside of a patched and tottering mansion, a relic from the Halec Revival that itself clung to the low bluff that separated the river and the warehouses of the 4th *division* from the bistros and boutiques of the 10th and 12th. Leena leaned against the railing in swirls of spice and browned butter spilling from the roof vents and watched swallows flit in the afternoon light.

Nadin answered the door with a sleepy look and his finger in a book.

"If we could only make our Birds fly like that," she said.

"I'll settle for making them fly straight. I got a Bird from Courant today that missed my box entirely and flew in Mr. Nounat's kitchen window. Thank goodness it missed the soup."



“What did he have to say?”

“Oh, the usual, ‘could be he reporting me to the militia’ and ‘aren’t I too old for playing of toys’ and ‘why do crazy friends all stuck like pincushion walk up the stairs so loud’ and then he gave me the Bird and a pot of the soup.”

“He *could* report you to the militia, and anyway I meant *Courant*, not Mr. Nounant,” Leena said and ducked under Nadin’s arm through the door. She sprawled in Nadin’s tattered leather wingback chair. “Mmmm, still warm.”

“It was,” he said mournfully.

“Plenty of room for both of us,” she said and draped one leg over the chair’s arm, patted the few free inches of seat-cushion with a wanton wiggle of her brows.

“Girl,” he said with a shake of his head, both in exasperation and explanation, and sat at the book-laden kitchen table. “*Courant* wants an article for the *Gazette* on the history of the Fort Majore and the Congress of Militias.”

Leena sighed and hung her head over the other arm to look at him upside down. “The militias realized that their ‘Chemist allies and the *golethem* make their weenie guns look limp, overcompensate with a wanking great building. There, you’re done. Let’s go to the Argile Rouge and eat.”

“I’ve got Mr. Nounat’s soup,” Nadin said. “And this article might run with an essay from *Pensecur*, the philosopher, on the *golethem* and the extension of moral agency so perhaps I should do a *bit* of research.”

“Okay, we’ll eat soup and then go to the Argile for a bottle of wine.” And when Nadin rolled his eyes she added, “You write better there anyway.”

The soup proved to be a thick tomato with chickpeas and curry and they each had two bowls and scraped the pot clean with some bread, and then Nadin gathered a few books into his satchel and they strolled through the little alleys of the 4th toward Burthen Street and the Argile Rouge. The stone cobbles still held the sun’s warmth though the days were shortening toward autumn and so they took the longer route past Leena’s studio.

There was a Bird there from Rakel, a test of the new wing design, and another from Sobette with a clipping out of the *Evening Rebuke* headlined “Auger Birds: Art or Insurrection?”

“It’s Augur with a ‘u,’” Nadin grumbled.

“Better to keep ‘you’ out of it, and me,” Leena pointed out. The article described the birds as “hatching from some unknown nest to become the latest craze among the artisans of the lower *divisione*.”

Nadin nodded glumly. “We’ve got to convince people to stop sending Birds in the daytime. And not to waste them on useless messages. Sobette’s a dilettante.”

Leena said, “Sobette is brilliant with trans-yeasts and programmed cultures. And he’s been working against the ‘Chemists for decades.”

“Only because they kicked him out for being a reckless—”

They raised their heads together. They could hear the irregular clang and scrape of a *golethe*’s tread in the street and then the bubbling of its yeast and cultures, the churning of its pistons and bladders. They held still until it lumbered past the studio door, heading west toward the river. Once it was quiet they got up and slipped outside with the sudden shared need for human company. The air was rank with the *golethe*’s passing, the street slick where its tanks had overflowed.

They went a few blocks in silence and were almost to the café when Nadin said, “When did an idea that was too crazy and beautiful to possibly work turn into something serious?”

“The Birds are no more dangerous than your article for the *Gazette*.”

“Dangerous to the establishment or dangerous for us?”

“Exactly,” Leena said and put her hand on the brass knob of the door to the Argile



Rouge but turned to Nadin before pulling it open. "That's another thing the *Rebuke* got wrong. It's never art or insurrection."

### chasing

**M**a'am Roenard's Cuttlefish Cabaret was back at the Court Theater. Nadin got tickets from a professor at the Elysium—"have them, dear boy. We're all a bit . . . what was your word? *Sated* with the cephalopods"—and fluttered them in front of Leena's face as she squinted and prodded inside a tiny faceted eye. Ten minutes later they were on the street grabbing finger pies and shave ice on their way to the theater.

The show was not much changed from the last tour but neither of them minded; they breathed in the briny air and sighed it back out as the swimmers spiraled in shifting colors. "*Sated* with cephalopods," Leena muttered as the *pas de duex* began. Nadin nudged her silent; she captured his elbow and gripped it tight as the great Sepiida traced the lines of his partner's lithe arms and legs with tentacles of fleet-ing green and gold.

After the performance, the audience sipped chilled liqueurs in which drifted clouds of inky spice, and mingled with the performers, human and otherwise. Leena and Nadin floated through the crowd, bubbly with drink and delight, washed up against the big tank in which a dozen of the smaller cuttlefish tossed shades of blue and green back and forth.

"They're chasing each other in colorspace," Nadin said.

Leena laughed and took Nadin's hand and hugged it to her chest. "In sculpting, chasing means buffing out the mold marks, the little imperfections. Evenings like this make me think there's a chance for . . ." She rubbed her cheek against his knuckles, propped her chin there and blinked at the cuttlefish through her own reflection. ". . . for the city," she said after a bit.

But the unmistakable laugh of the Marquesa d'Anon brayed from one of the boxes overhead, echoed in the tank as pink and puce. Leena lifted her head, looked up at the box and then around at the crowd. "Gods, is Frans here?" she asked.

"Well, he didn't say if . . ." Nadin said, but there was Frans d'Anon, Viscount, pale and blond and taller than Nadin if not as broad across the shoulders, coming toward them with a drink in each hand.

"Nadin, dear boy, it's been weeks, positively weeks." The Viscount set a glass in Nadin's free hand, cupped fingers damp and chill from the ice around his neck and shook him gently. "Honestly, how have you been keeping yourself?" He turned white teeth toward Leena. "Have you been keeping our Nadin here hidden away, you naughty thing? Viscount d'Anon at your service." He sketched a bow and slipped his arm across Nadin's shoulder.

"We've met," Leena said, "once or twice."

Nadin added, "Leena DiLarri. The mid-winter reception at the—"

"Of course, the *artist*," d'Anon said. "Oh, you must think me terribly rude. Please, take the other, I insist."

Leena took the proffered drink and they wound a cautious path through conversation. The Viscount's fingers slowly undid Nadin's braid and Nadin leaned until his hair fell on the Viscount's shoulder. Their hands slipped down each other's backs. Leena pushed her shoulders against the tank and tried to think of artists they would all know who hadn't been arrested while behind her the cuttlefish took turns copying her tattoos.

Laughter spilled down from the box overhead, the Marquesa's voice raised with others in some shared punchline about tentacles and spilt ink. The Viscount gave a



sigh that seemed at least somewhat sincere, and said, "Duty calls, must rescue mother from herself. Family honor and so forth. Nadin, you really must set an evening aside for me soon and we will catch up. Miss DiLarri, so lovely."

Leena bit her lip until the Viscount was out of earshot, his shape stretched by the tank into a scrolled golden line.

"He's not at his best in public," Nadin said, "especially not when the Marquesa has him out on display. And not with . . ." He frowned into his drink. "Not with competitors."

"For you, you mean? Don't got the dice to roll in that game, do I?"

"Leena," Nadin said with a bit of reproach his voice.

"Sorry, sorry. I'm not at my best in crowds either." She took a long sip, stared over the edge of her glass into the tank. "Not of people, anyway. I make do with bronze birds and yeasts and one friend at a time. Did you know the word *sepia* means cuttlefish? They used to catch them for their ink. And the cuttlebone is used to make molds for jewelry. I have some in my—"

Nadin put a finger to her lip and she stopped. "Sometimes I just need arms around me too strong to throw off, and someone to say 'Hush. It's okay.'"

Leena sighed and held up her hands in apology, or surrender. "If the Viscount d'Anon does that, I shall forgive him the failings of his class, not to mention his height and sex and hair. *Perhaps* his hair. But not his parentage; that's too much." And on cue the Marquesa let out a sort of hoot from the heights above them.

Nadin chuckled, somewhat ruefully, and said, "Nature works in mysterious ways, girl, but she provides. Somehow she provides."

Leena gave him a grin then and a sideways glance and said, "Ah, but art improves on nature." She leaned forward to put her spidery fingers onto the tank, and the cuttlefish rolled to reflect her in splayed bronze lines.

### spruing

Nadin shut the studio door behind him and then realized why it had been open when he arrived; it was ferociously hot inside, and thick with steam and smoke and a sharp smell like vinegar. "'Sblood, girl, what are you doing?"

Leena was squatting on top of the worktable, guiding a writhing stream of wax into a mold clamped between bare knees.

"Too many things at—ah!" The mold overflowed, a tracery down her shin and between her toes. "—Once," she finished, waited until the wax faded to matte and peeled it away whole; a long complex curve and a forking like claws. She growled and darted it at Nadin.

Who set a package at her feet and took the wax between fingertips and turned it downside up, flower-like.

Leena's grin flashed across her dark solemn face and slipped away again. She took the proffered bloom and dropped it into the melt bucket, tiptoed across the clutter on the table and dropped to the floor. She started toward the casting pit, stopped, returned to pick up Nadin's package. She shook it, and said, "Hmm, not wine. Or candy."

"Map coils," Nadin said. "I have an idea for secure messages: pairs of birds flying different routes. If only one shows up, you know the other was caught and you better start packing. I need a couple of birds to test them."

"In a minute," she said and handed them back to him, started for the casting pit again, stopped again, went back to the workbench.

"And I need more acid and resist for the next batch of coils," he said, turning in place to follow her.

"Mmm. Hold this down," she said, tapping a ceramic mold on the workbench. She



worked a knife along the line between the two halves of the mold until it opened with a sighing sound to reveal the flattened shape of a bird's body. She handed it to Nadin. It was a sooty black with spots of mottled yellow and slightly spongy to the touch.

"I thought the wax melted out when you fired the mold in the kiln?" Nadin said.

"It does, and it did this morning when I made the mold. That there's not wax, it's yeast."

Nadin nodded with careful consideration and handed the thing back to her. "And you wonder why I don't bring you wine and candy," he said.

"Wait until you see what the yeast left us." She set the thing into a bowl and rinsed it, first with something out of a jar that caused it to bubble and collapse, and then with water. What was left was a smooth matte black and as Leena gently fished it out it rippled and hung like cloth.

"Hold out your hand," she said. Nadin made a face and she made one back at him until he relented and cupped his hands.

The thing flowed like velvet, almost weightless and neither warm or cool to the touch. "Like satin smoke," Nadin said, and Leena laughed, delighted.

"Pretty close, chemically," she said. "The process is a lot like biofoam, where the cultures deposit little shells of metal and carbon to make something strong but light. Only in this case, it's a shell instead of a solid, little curls of carbon that interlock like chain mail. Imagine a bird with this stuff as skin. Imagine a *shirt* of this."

"I'm guessing it only comes in black," Nadin said.

"That's a problem?" Leena asked. "Okay, there actually *is* a problem . . ." she said, taking it back and shifting it over her fingers until one slipped through and she wiggled the skin like a puppet. "Holes. And it's tricky to work with. Sobette has some ideas for cross-modifying the cultures, getting them to lay metal threads through the carbon, make it easier to combine with more traditional materials."

The little blob of a puppet spun on her finger and a long thin tube of the carbon cloth dangled down.

"Ah," Nadin said.

"Sprue hole in the mold," Leena explained. "Got to let the pressure out somehow."

"Don't we all," Nadin said.

### slurry

**R**akel staggered through the door of the Café Argile Rouge, face pink and shirt splotted with sweat. He dropped into the seat across from Nadin and gasped, "Sent Bird to your house, but . . . figured you'd be here. It's Leena."

A cold grey chill flushed through Nadin like the aftermath of the iced aquavit they served in the upper *divisiones*; there was no ice to spare on drinks down in the 4th. He bit down on a curse and flicked his eyes toward the corner table where Adler slouched over an abandoned game of eschequere with Rynsky, both known informers for the militia. "Rakel, drunk already in the afternoon?" he said, just loud enough to be overheard.

Rakel met his eye and replied in the same tone. "I seem to have lost my muse at the bottom of a bottle of excellent red, and have been looking for her."

"She'll be drowned by now," Nadin said, gathering his papers as fast as was seemly.

"Come help me reach the bottom, friend, and we shall give her the kiss of life," Rakel said, gathering books into Nadin's satchel. "With luck, she'll be thoroughly soured and thus for once open to my charms." He took Nadin by the arm with a thin smile for the house and hurried him through the door.

The sunlight sprawled flat and heavy in the street, summer reluctant to move



aside for autumn, but Nadin still felt cold. "Have they taken her? The militia?" And when Rakel shook his head, added in a voice that sounded strange in his own ears, "The *golethe*?"

Rakel kept shaking his head, raised a hand as he gulped in a breath. "An accident. I don't know the details. I got a PneuPost from Sobette. She's at his workshop."

Nadin stopped in his steps. "A *post*? The militia will have read it before you did. That bastard."

"He was discreet. He didn't mention her by name. He quoted Tonneau, that line about the sculptress wind cut by the stony blah blah."

"The militia read plays as well."

"Yes, but they don't understand them. Come *on*."

Sobette's workshop was a long low building of iron and red tile in the 5th *divisione* where it ran up against the river. The interior was dim, the air miasmatic with the yeasts and volatiles of his craft.

Leena was on a stool by a row of fermenting vats, slumped shoulder down on a table. Sobette sat opposite with his elbows on the table and his hands clenched in his hair. His assistant nervously rocked from leg to leg nearby. A woman in a starched white linen jacket crouched down by Leena, speaking softly. Sobette looked up as Nadin and Rakel approached, still gripping his handfuls of hair, and said, "It wasn't my fault."

Nadin ignored him and knelt next to the woman in white to look into Leena's face. Her skin was drawn and sallow, her lips white around the edges. Rakel stopped behind him and said something quiet and fervently profane.

Leena gave him a faltering smile that collapsed into a grimace. "Experimenting," she said. "Know me, always sticking my fingers where they shouldn't . . ." She touched his arm with her left hand; Nadin took it in his own and stood.

Leena's right arm was stretched out across the stained wood. The last three fingers of her hand were an ooze of soft bubbling bone and bright tangled silver nerves, in a larger pool of greasy yellow foam.

"We were working with a programmed culture," Sobette said. "Trans-yeasts. A new approach to bio-interfaces." He paled under Nadin's glare, but continued, "We've neutralized the culture spread but her . . . the nerves are still, ah, active."

"She should be in hospital," the woman in white said. Nadin recognized her now from the clinic on Burthen Street.

Sobette's eyebrows shot up in alarm, and his assistant stepped back from the table and eyed the rear door.

"No hospital," Leena said. "Just cut 'em."

The woman folded her arms. "There's a reason this sort of research is illegal."

"Tell that to the makers of the *golethem*," Leena said. "Nadin, tell her—" She hissed as her hand slid against the wood.

Nadin squeezed the fingers of her whole hand and said in a gentle tone and one he thought thoroughly reasonable under the circumstances, "And your clinic is entirely licensed, yeah? What's legal and what's right are out of sync in the city."

The woman scowled and wouldn't meet Nadin's gaze; she dropped her chin and stared at Leena's hand as if it were less a challenge. "Her nerves are just . . . dangling."

Nadin looked across at Sobette. "Rot it, man, tell me you don't have a vat of painkillers somewhere in here."

The 'Chemist fumbled on the table, held out a palm with three small white pills, somewhat irregular in shape and unmarked. "She won't take them," he said.

Leena said, "My body." And to the woman in white, "You cut deeper nerves than



these every day, woman with more to lose. Fingers are gone already, just need trimming. Hell with the pills, Sobette, get me scissors." And then her eyes focused elsewhere and Nadin had to hold her upright on the stool.

The woman puffed a breath through pursed lips. "I'm an obstetrician, not a surgeon," she grumbled, but she unfolded her arms. "We'll need water. And better light." She picked up a satchel from the floor and set it on the table, with a brittle clatter of glass and sharp metal.

Sobette waved his assistant into motion, and said, "We have antiseptics, and something that will put her right out. And cultures to seal the wound." That last with a defiant look for Nadin. "Leena, will you take the pills now?"

Leena nodded weakly. "Now I will," she said. "Just . . . another piercing," she said to Nadin with a twitch of her head that set the rings along ear and eyebrow jingling, but her grip on his hand tightened.

### burnout

**T**he last months of winter were not that cold but wet. The sun never stayed long enough to dry the streets and the bluff outside Nadin's flat dribbled and ran and threatened to tumble an entire row of 12th *divisione* shops down into the 4th. Nadin collected the cobbles that dropped onto his roof and used them as bookends. He was busy with a series of articles for the *Gazette*, a tour of the *divisiones* and the places in each where their history was most evident or most evolved. Three times a week he walked up the hill to tutor Frans in classical languages, sessions that often ran through dinner with the Marquesa—any topic more than a century old was safe—and ran later still after the Marquesa retired for the evening.

The rest of his time, the bulk of it, was spent organizing the Augur Birds into a network as pervasive as the PneuPost. The awkward alliance of those who shared the need for uncensored conversation—longshoremen and librarians, academics and street artists—had somehow become a movement, had somehow made his maps and knowledge of the city central and significant.

All this kept Nadin away from the Argile Rouge and Burthen Street and thus from running into Leena.

He had spent the week after the accident nursing her. She'd had a secondary reaction to the culture that had taken her fingers, a fever and puffy splotches that threw her tattoos into wild relief. The doctor from the clinic had refused to see her after her impromptu surgery; it was not fair to imperil the women who relied on the clinic and whose problems were not self-inflicted, she had said when Nadin went to beg her help.

Sobette had sent vials of cultures that were meant to counter the other and Nadin had flushed them down the sink until the drain spit back bubbles that clung to the walls and smelled of old vinegary apples and rotted meat. They had opened all the windows and had fled to the Argile Rouge with Leena's hand covered by a shawl from the attention of the neighborhood informers and had gotten into an awful row which was, in hindsight, far more incriminating than a few missing fingers.

Leena had seen no reason at all for her accident to discourage her from further work with Sobette. The yeast had in fact done exactly what was intended in leaving the nerves alive and intact, she had said, and the work pointed to a merging of the bio-mechanical and the human, and wasn't that the solution to the problem of the *goletthem*? What were his words? "As alien and impartial enforcers of the city's laws they have replaced morals and ethics with mere effect?"

Nadin had plucked at the shawl over her hand and hissed, "Words, yeah, but



Leena, your fingers aren't 'mere effect.'" And with wine-bleared frustration added, "You can't change people by swapping out *parts*."

And Leena had said, "I don't *want* to change people. I just want to give them choices."

"There are no easy choices in the city," Nadin had said, and had blushed over the triteness and spluttered, "I mean, if you *had* the power of the *golethem*, what would you choose?"

Leena had answered with a glare like a challenge, "I would save the people I love." And she'd waved her maimed hand there in the middle of the café and asked, "Does this look like an easy choice to you?"

And they'd gone around a few more times with him saying, "I wasn't talking about you, you're a different case altogether," until she said, "Words, words, dammit, *show* me," and he swore and stood up but she walked out first and that had been the end of autumn.

The winter's damp and relative warmth had led to widespread rot in the winter barley crop, and this in turn led to a shortage of the small beer that was a staple of the lower *divisiones*. The irony of this failure was much observed in both the upper and lower city, ruled as it was by the 'Chemist guilds and most particularly by the Brewers and their manipulated, manifold yeasts. The longshoremen and warehouse workers of the 9th made their observations known via a general strike and running battles with the militia, and after the *golethem* took and caged two students for painting slogans on the walls of the Brewers' Blue Tower, the 9th's anger frothed up in utter riot.

After four days of watching the mob and militia and the misshapen lumps of *golethem* from the safety of his hillside, Nadin could no longer deny the need to check on Leena. He wrote out a concerned yet correct message and threaded it into place around the acid vial of an Augur Bird, but instead of coiling in the route to her studio and launching the Bird from his porch he set it on the table and walked down the hill himself.

He knocked and Leena opened the door, half-stripped, sweaty and sooty, which meant she was casting metal. She was a bit thinner, but not unhealthily so, and had a new tattoo that spilled from her right shoulder all down her side.

"I thought you would send a Bird," she said, in a tone that made Nadin very glad he had not. "Help me finish this lot," she said and walked back to the casting pit; the new tattoo curved like a wing down her back as well and looked sharp enough to slice.

"This lot" proved to be linkages for a new run of Birds. Rakel and his cohort were manufacturing basic components these days using the facilities of most of the schools and universities of the lower city, but Leena still had the master molds and built some birds herself, start to finish. All but the map coils, of course. Only Nadin really understood their blend of geometry and geography; he etched them in his sink and passed them to Rakel every few weeks.

Once the parts were poured and cooling, Leena ducked into her room in the back and came out somewhat cleaner and more appropriately covered and they went to the Argile Rouge for omelets and a bottle of wine and Nadin thought that that had been a test, and that he had passed.

The test came afterward, though, back at the studio. Leena pulled out a box from under the workbench and took out a set of vials that were unmistakably from So-bette and syringes and swabs and something wrapped in soft cloth. She unwrapped that last to reveal half a hand, three fingers joined at the knuckles and made of polished brass and carbon biofoam tipped with crescents of onyx like claws. She showed Nadin the tiny pistons and bladders of yeasts, the delicate gears and cables, all familiar from the Augur Birds but stronger and more precise. And she explained to



him the network of supports and terminals and razor-edged tubes that would slide into her palm and merge the fingers with her flesh and intent, once the cultures and yeasts had opened the way.

"You came just in time to help," she said.

Nadin surprised himself with a helpless but not joyless laugh, shook his head and said, "Sblood, girl, I came to make sure you were *okay*."

"Exactly," Leena said, and Nadin realized that not only had he decided to help her but that it was both right to do so and what he wanted.

The process ended up taking the night and most of the next day and was messy at times and excruciating at others and at the end the fingers twitched and clattered of their own will. It took another two days before Leena could extend one finger while curling the others under—"Now I'm ready to join the riots," she said happily—and another week before she could hold Nadin's hand in hers without leaving scratches and a day beyond that before she admitted that she'd had the box stored beneath the workbench for a month, waiting for him.

### testing

Nadin's friendship with Leena settled into new patterns. They spent their time in serious planning for the Augur Birds or in absurd, drunkenly slurred conversation at the Argile Rouge. Leena's flirting was less frequent and less frivolous; Nadin was not sure that this was an improvement.

Nadin's series in the *Gazette* had been well received, and he was now writing a regular column on "Hidden Gems of the City" for the *Evening Rebuke*. And he was working on extending the network of Birds into the outer reaches of the city. He went on weeklong walks into the outlying towns and countryside in support of this latter effort, which meant an end to his tutoring and a subsequent cooling of his relationship with the Viscount d'Anon.

Leena, in turn, was working more and more directly with programmed cultures. She set up her own laboratory in Sobette's building and over time moved much of her equipment there. Her old studio became more and more a place to unwind and at times assemble a batch of Birds; the new work, the *art*, was taking place in the lab that was neither welcoming nor comfortable for visitors.

Nadin was surprised, therefore, to return from an outing that had taken him down the river into the scattered villages of the estuary and discover a wagon outside the studio and teamsters moving crates in rather than out.

Leena was inside, standing on a stool and hanging chains from hooks screwed into a beam, with metal stands and crates surrounding her like fortifications. She looked at him and nodded, more to herself than to him it seemed, and chewed her lip as she made the chains fast and the teamsters departed. Then she jumped down and crossed to him and put her hand on his chest.

"You're back," she said, like a question.

"Defeated," Nadin said with a laugh. "Mapping those shifting sands, not to mention the shifty villagers, is beyond my skills." There were questions in that as well, though, and in his looks at the rigging and the stacked chests.

She ran her fingers along the backpack straps across his chest; her control over the new fingers was perfect now and he had to look down to confirm that it was her hybrid hand. When he looked up again she was looking at him with her dark eyes narrowed and still questioning.

"Do you want to help me unpack?" she asked. "Or go unpack yourself and rest up after your trip?"



He shrugged and instantly regretted doing so, let the pack slip off his shoulders instead and slung it into a corner. "I rested enough over the winter," he said.

Leena needed a few minutes to adjust the chains and stands, so Nadin washed his face in the sink and made tea and put on a old shirt of his that Leena had been using as a smock or perhaps, judging by its state, a drop-cloth.

And then Leena said she was ready and they pried the staples from a crate and in it was a long curved shape, maybe two feet long or a bit more. The surface was a deep matte black traced with bronze and verdigris in fractal curves like veins or vines. Clusters of tubes and cables protruded from each end around massive joints of metal. Nadin ran a hand along a curve and only then recognized it as a massive thigh. The skin was slick but not cold and it gave slightly to his touch.

"What is this?" he asked.

"You've seen this stuff. It's that bio-layered skin I wanted to use for the Birds. Though I've figured out how to make it self-repairing."

Nadin looked at her until she flushed a bit, but then her eyebrow went up and she said, "Oh, come on, tell me you don't know."

"It's a *golethe*," he said; it came out so angry that she stepped back, blinking in almost comic alarm.

"More like a *not-golethe*, hopefully. Not finished, regardless. I'm not really sure *what* it will be when it's complete." She stroked the carbon flank, rested her hand on his. "It will be easier to explain when it's set up."

He helped, even though he felt betrayed by the mere existence of the thing and terrified of its implications. But if this was some natural progression from the Augur Birds then he already shared some responsibility, he thought; better that he also share some understanding. And she was going to put it together regardless of his help.

It did not take long; the joints slid together effortlessly, the tubes and cables intertwining as if they had a life of their own. Which was to some extent true; sections were already primed with the yeasts and cultures that would serve as muscles and nerves and repair systems. It was like the Augur Birds and Leena's fingers but everywhere a layer more complex, more lifelike.

The assembled form hung from its chains and dwarfed even Nadin. From the front it seemed almost whole: polished black eyes like those of the Birds, faceted and glittering under brows of gold, arms and hands that gracefully tapered, a wide chest chased in bronze and ridged like wings, feet like talons. If it was not a man in scale or shape, it certainly was closer to it than to the squat-clubbed mockery of the *go-letthem*.

"So," Leena said, standing in front of the thing like one condemned to be taken.

And angry as he was, he could not help but marvel at its strange, sensual beauty. "Some of it, the face and the lines . . . it's you. As if you were grown into one of your Birds."

"Our Birds," Leena said. "There's a lot of you in there, as well. It's no wonder you recognized that thigh."

And though he had been ready to accept some responsibility for the thing, that was too much. "So you finally just *take* my body, after I say 'no'? There's a word for that, isn't there?" And when she flinched, the way she never had flinched when she'd lost her fingers, he went on because he could hurt her worse with his words than his hands, "Two words in this city for that sort of violation, and the worse of the two is *golethe*."

"Oh Nadin, no, no, please, this is what you need to see," she said, dragging him by his grip on her shoulder.

The rear of the thing, the *not-golethe*, was splayed open, the yeast-grown skin



draped over the supporting stands, cables and pistons and vats exposed, clusters of delicate gears like seashells on rocks. Hinged ribs were spread wide, and from the inside of the metal skull the needle points of tiny wires and tubes glittered. Nadin had the strange sense of having seen it before, an engraving, a book on the history of the Fort Majore it was, torture devices locked around bodies like masks or cloaks. He shuddered and shook his head and stalked back to the stool and sat with his head in his hands, speechless and blind between fury and fear.

"The difference between our birds and the *golethem*," Leena said, "is that the *golethem* act on their own and the birds follow the routes that *you* set, that you lay out with your own hands." She interlaced her fingers, flesh and otherwise, with his. "The 'Chemists say that by making the *golethem* autonomous they have made them beyond corruption or doubt. But so are the sea and the winds and the sun. They hang criminals in cages and let nature do their work for them, Nadin, *look* at me." He let her pull his hands away and looked up into her face with her rows of little gold rings and her spiraled tattoo and her anguished desire for his understanding; it was her face because she had made it so, more so than anyone else he had ever met.

"Nadin, look," she said, "they might as well fling them from the bluffs and say 'let nature determine their guilt,' like they did in the old days if you were accused of being a heretic or a witch or a 'Chemist. Nadin, whatever this thing becomes, at least it will be because I make it so."

And that echo of his own thought was what he needed, not to end his anger but to lay it where it belonged, on the streets of the city.

She still had his hands in hers, and she shook them gently. "Made by these hands," she said and Nadin could not think how to tell her that they two were the only ones who would see her hands as human.

### pouring

It was one of those days of early spring where the air was cool and softly damp, but the sunlight sharp and suggestive, and your mood changed as you passed from one to the other and back. Leena was sitting at one of the outside tables at the Argile Rouge. Nadin almost passed her by; she had a cloche hat pulled down to her eyebrows and a neckcloth knotted over a buttoned white shirt and woolen waistcoat. She struck a pose in response to Nadin's double-take, chin up and shoulders back like the models in the *Evening Rebuke's* fashion plates, nodded toward the other chair.

"Auditioning for a play? A job as a mannequin at Moda?" Nadin guessed.

"Hoping to pick up a date."

"Anyone in mind?"

"I'm not particular," Leena said and batted her eyelashes, but she was smoothing a pair of pale grey gloves against the tabletop, the tips of her metal fingers leaving grooves in the thin leather.

Nadin took a glass from the next table, leaned past her for the carafe of wine. "So?" he asked quietly.

"I went to meet Albert Courant at the Bistro Indènt about his One-Way Birds."

Nadin grimaced and looked around for listeners. "I know, I know, we said we'd deliver next week. I think I've got the guidance problems solved, as long as his correspondents or whistle-blowers or whoever launch them from inside the inner twenty *divisiones*. They should be untraceable." Leena was shaking her head and Nadin rolled his eyes and said, "Less traceable than the damned PneuPost."

But Leena put her hand on his, cold brass against dark sun-warmed skin, leaned



in and said, "They took Pensecour. A *golethe* took him out of the Indènt and across the Plana d'Oss and put him in a cage."

"Pensecour the philosopher?" Nadin asked, confused and too loud. "But I was just reading an essay of his in the *Gazette*." He patted his pockets, pulled out the crumpled broadsheet and flattened it against the table as if it were a counter-evidence. "He was writing against the riots in the 9th, against violent protest of any sort. Why would they take *him*?" He paged through the paper in search of the essay.

"*Golethem* don't say 'why.' They don't say anything. Nadin, it took him while I was *there*," Leena said and Nadin pushed the paper away and stared at her, but she was looking down at her hand with her mouth twisted in disgust. "I've never been that close. It was so big, and the smell . . . It didn't even notice us, it just filled the room and we got . . . *displaced* with the furniture and the air. I could see into one of its tanks, I thought it was copper gone green but it was glass and the cultures inside . . . Sobette has nothing like that. Old. Old and wrong and rotten." She looked up at him. "It dragged Pensecour out by the leg and put him in a cage alongside the rioters and rapists. He won't last a week."

He took a deep breath and another and realized he was expecting the soured beer and hot brass of the *golethem* in the spring air. He looked around again but no one was near; even the street was empty. "Were there 'Chemists with it? Militia? Were you seen?"

Leena shook her head again but said, "There's always someone watching." Her hand was shaking, the onyx claws that were her fingernails digging into Nadin's palm, but looking into her eyes he realized it was not fear but rage.

### release

**I**t was night and there were birds lying in the street, some of theirs and some of the kind with feathers that trailed blood instead of yeast and had been shot down incidentally. Nadin saw one of Courant's One-Way Birds outside the Argile Rouge; one wing was missing and the other beat a staccato rhythm against the cobbles. Somehow its acid vial had not broken and its message scrolled out of its body, an auspex for anyone to read. He kicked it into the curb without breaking stride and it shuddered to a stop, the message drowned in the dreck of the gutter.

There was more than bird's blood in the street, and other bearers of auspices. Rakel and some of his fellow students from the Elysium were outside the hardware store on Asmuth Street loading a trailer with shovels and buckets. The Picnic Protests against Pensecour's arrest had finally crumbled into violence. The 9th *division* was aflame, they said, and the militia had fled. They urged Nadin to come help fight the fires, but he shook his head. Rakel caught Nadin's arm, pulled him aside. "It's paraffin that's burning, and kerosene. I saw more barrels of it being taken up Carthal Boulevard to the 18th." The d'Anon estate was in the 18th, where the Boulevard wound around trees that had been there before the road had been laid. When Nadin reached the lower buildings along the river he could see those trees burning all the way up the hillside, and the bells of the Blue Tower were ringing.

The door of Leena's studio was open. Nadin's toe caught a PneuPost cylinder on the floor and it spun across the floor and into the casting pit. A few birds lay open on the workbench, a message in Sobette's splotted scrawl fluttered in the breeze from the door. The crates of Birds that had been stacked along the walls were gone. As was Leena's not-*golethe*, the stands and cables that had held it torn and scattered on the ground.

Leena was not there.



Nadin stopped and squatted, one hand up on the workbench for support and the other on the floor. His vision blurred and blackened but his sense of smell was stubborn and he was unable at first to free a hand to cover his nose and mouth. There was the copper tang of brass and bronze and the flat iron stink of blood and the beer belch of living yeast and the stench of things no longer living. He managed to lift his hand from the floor to his face but it was no help, it was fouled because the floor was covered with the contents of vats and bottles and of a human body. Impossible that Leena's thin form could have held that much, Nadin thought with a strange sort of hope, impossible that someone could be *emptied* so thoroughly without rending the building as well. But the room was barely disturbed, no more than it ever was when Leena was deep in a project, and the footprints that had tracked red and grey and the bubbling yellow of yeast out the door were huge and in no way human.

Those footprints drew him back into the street and then the crowd took him up and he was lost for a while. Someone started singing an old drinking song, "Scatter your seed, John Barley," and then everyone was singing it but there were new verses that Nadin did not know, nor did half the crowd it seemed, so the song scattered down diverging paths. Someone said that Pensacour was dead in his cage, which seemed likely, and others that the Blue Tower had fallen, which did not. "Listen, listen," the word spread, and for a moment they all stopped and did just that, hundreds, maybe thousands standing still on Burthen Street and the only sound was their breath and their hearts and the swish of Augur Birds overhead. The bells of the Blue Tower had fallen silent.

Nadin decided then to go up the hill to the d'Anon estate and find Frans. He would not have abandoned his mother, and the Marquesa d'Anon would not have abandoned her estate; that seemed sure if anything did. *I would save the people I love*, he thought. But it was almost impossible to move counter to the flow on the main streets, and if the side streets and alleys were less crowded the people there were more unpredictable and many of them were armed. Nadin was somewhere in the 6th *divisione*, and he thought his best chance of getting out of the lower city was to pass through the Plana d'Oss and from there onto the wide boulevards of the 14th. The mob at first obliged and ebbed toward the Plana, where a new rumor had Pensacour leading the sack of the Blue Tower. But then word spread that Fort Majore was surrounded and protected only by militia—the *goletthem* had pulled back to the Towers of the guilds—and the tide shifted south toward the river.

Nadin swore and fought the crowd, and finally had to risk the side streets; when challenged he cited the Augur Birds or the Viscount d'Anon depending on the accents of the challengers, the cut of their clothes.

In a little square behind the Agricultural School he stumbled onto a scene that seemed nonsensical at first: a *golethe* sprawled in a fountain, the metal of its vast torso torn and crumpled like cloth. Its vats and tubing were tumbled out and empty and the fountain—a sculpture of Spring as a maiden bearing an armful of grains—spewed a foul-smelling grey foam. A few dozen people, some of them families with children, stood solemn and silent in the square. "Who did this? What did this?" Nadin asked; some lowered their eyes and others stared at him but no one spoke. After a minute he ducked his head in awkward acknowledgment and passed on.

There were *goletthem* in the Plana d'Oss as well, but they were whole and on their feet. There were uniformed militia as well, and some who had the arms but not the uniforms; they were taking occasional shots at each other with no apparent regard for state of dress. Many of the cages that had lined the Plana and had held those condemned to slow death were down and broken on the cobbles, their burden of bones scattered. Nonetheless, the square seemed strangely calm to Nadin after the mobbed streets and tense barricaded alleys. The tables and chairs of the Picnic Protest stood



about, some still covered with checkered tablecloths and plates of food. Nadin paused by one such and ate a piece of bread from a basket, feeling nothing at all for a moment beyond a vague sense of hunger.

There was an Auger Bird on the table. Nadin picked it up: it was of a type he had never seen, hand-made, not based on Leena's and his designs but something new. Its head was missing, and Nadin looked about for it, saw it crushed on the ground maybe ten feet away and standing over it a *golethe*.

Despite Leena's description of the *golethe* in the Bistro Indènt, despite seeing the broken one in the fountain, despite a lifetime of anticipating their stink and heavy steps, the sight of the thing standing that near was shocking. I haven't really *looked* at one since that first time as a boy, Nadin thought. It was half again as tall as him. Its knees were higher than its hips, its feet huge and turned out instead of forward. The bronze torso was vast and asymmetrical; if there was any logic to the shape, it was obscured by protruding vats and intakes and decades of corrosion and the dribble of corrupted yeasts. Two massive arms hung from either side. There was no head, just a cluster of valves.

The *golethe* had caught a man by the arm, and the man's other arm was held by a second *golethe* that faced the other way and seemed oblivious to the first. The man hung suspended between the two and kicked weakly at first one and then the other as he was tugged about. Nadin started that way with only the bird in his hand, but a group came from somewhere behind him, well armed and dressed in the green jackets and caps of the Mechanics High School, and began firing at the *golethe*s. The shots rang and ricocheted around the suspended man, and Nadin shouted at them to take care but the sound of the guns was too loud.

The table next to him began to jerk and shudder across the cobblestones, shedding its plates and cups and stained blue cloth, moving for all the world like some squat wooden *golethe*, and Nadin stared at it for a few seconds before realizing that it was being driven by the bullets that were streaming around him. This was not the rebound of the students' shots; a group of militia, down the hill from the 18th *divisione* by their uniforms, was standing a dozen paces away and shooting with arguably poor accuracy but great determination. There was a dull throb in Nadin's thigh and a sharp stinging all across his back as if from a hundred splinters. The numbness that had overtaken him shattered so suddenly and thoroughly that he thought the militiamen must have heard it because their faces had gone white and wide-eyed over the sights of their rifles; he saw that as he ran toward them screaming his rage and brandishing the headless bird like a weapon.

Arms wrapped around him, impossibly strong, lifted him up off his feet and turned him away toward the edge of the Plana with the *pang* and chime of bullets on metal and the smell of yeast all around, not the stale stink of the *golethe*s but the tart warmth of rising bread. He struggled against the arms, which were carbon black and tattooed in woven bronze and ended in thin fingers that curved like bird wings and were tipped in onyx claws, and managed to twist himself around and look up into the calm face with its dark faceted eyes and eyebrows of looped gold.

"Leena?"

"Nadin."

"Sblood, girl," but that wasn't right anymore for that great voice, this broad chest. "What have you done? The floor of your studio. Your body."

"My body," it said. "Lost wax."

The voice was deep and thrummed through his chest like the fallen bells of the Blue Tower, but it was Leena's voice nonetheless. They had reached the shelter of the roads that led up the hill but the long legs did not stop, the arms still held him, too strong to throw off. "Hush. It's okay," she said. ○



# NEXT ISSUE

## SEPTEMBER ISSUE

Death has newly become “The Discovered Country” in **Ian R. MacLeod’s** suspenseful September 2013 novelette. This story of romance and deception takes us about as far into the Great Beyond as we are likely to get in our lifetimes. You’ll be dying to learn how the tale turns out!

## ALSO IN SEPTEMBER

The rest of September is crammed full of short stories and novelettes. **Benjamin Crowell** shows us how uncontrolled copyright law could destroy civilization as we know it and punch “A Hole in the Ether”; an alien invasion is described from an unusual viewpoint in **Dominica Phetteplace** story about “What Changes You, What Takes You Away”; while **Jay O’Connell** lets us know that we just might survive the invasion as long as we can find “That Universe We Both Dreamed of”: “A Stranger from a Foreign Ship” has a brutal adventure in **Tom Purdom’s** short story; **Leah Cypess’** teens discover a new way to appreciate “What We Ourselves Are Not”; and with “The Unparallel’d Death-Defying Feats of Astoundio, Escape Artist Extraordinaire,” **Ian Creasey** wins the prize for the tale with the longest name in the issue. Fortunately, **James Sallis’s** first story for us in close to thirty years is “As Yet Untitled.”

## OUR EXCITING FEATURES

**Robert Silverberg’s** Reflections examines the sleight of hand that takes nongenre tales and themes and creates “Translations” that resemble science fiction; **Peter Heck’s** On Books includes reviews of *Other Seasons: The Best of Neal Barrett, Jr.*, and Victoria Blake’s *Cyberpunk* anthology; plus we’ll have an array of poetry that you’re sure to enjoy. Look for our September issue on sale at newsstands on July 16, 2013. Or subscribe to *Asimov’s*—in paper format or in downloadable varieties—by visiting us online at [www.asimovs.com](http://www.asimovs.com). We’re also available individually or by subscription on [www.Amazon.com](http://www.Amazon.com)’s Kindle and Kindle Fire, [www.BarnesandNoble.com](http://www.BarnesandNoble.com)’s Nook, [www.ebookstore.sony.com](http://www.ebookstore.sony.com)’s eReader, [www.Zinio.com](http://www.Zinio.com), and from [www.magzter.com/magazines/](http://www.magzter.com/magazines/)

## COMING SOON

new stories by **Kristine Kathryn Rusch, Jack Dann, Gregory Frost, Charlie Jane Anders, William Preston, Ian McHugh, Paul Di Filippo, Henry Lien, Igor Teper, Steve Rasnic Tem, Ian Creasey, Sheila Finch, Alan DeNiro, Neal Asher, M. Bennardo, Marissa Lingen**, and many others!



Kristine Kathryn Rusch's second novel in the Diving Universe, *City of Ruins*, won the Endeavour Award for best novel by a Northwest Writer last fall. Some parts of the book previously appeared in *Asimov's*—and one, "Becoming One With The Ghosts" (October/November 2010), won the Reader's Choice Award. Her latest diving novel, *Skirmishes*, is coming out from WMG Publishing sometime this summer. WMG Publishing is also struggling to swallow her entire backlist, a chore they've been working on since 2010. Kris is editing again, too. She's doing an anthology series called Fiction River, along with her husband Dean Wesley Smith. The first issues are already available. The author's latest story takes us back to the early days of the Diving Universe. Racing against time, a young woman tries to rescue the crew of a missing starship with . . .

# THE APPLICATION OF HOPE

Kristine Kathryn Rusch

## 1

**"R**equesting support. The *Ivoire*, just outside Ukhanda's orbit. Need warships." The calmness in the request caught Captain Tory Sabin's ear before the name of the ship registered. She had stopped on the bridge just briefly, on her way to a dinner she had sponsored for her support staff. She wasn't dressed like a captain. She had decided to stay out of uniform and wear an actual dress for a change.

At least she had practical shoes on.

But she felt odd as she hurried across the nearly empty bridge, covered in perfume, her black hair curled on top of her head, her grandmother's antique rivets-and-washers bracelet jingling on her left wrist. She grabbed the arm of the captain's chair, but didn't sit down.

Only three people stood on the bridge—the skeleton crew, all good folks, all gazing upward as if the voice of Jonathon "Coop" Cooper, captain of the *Ivoire*, were speaking from the ceiling.

Then Lieutenant Perry Graham, a man whose reddish blond hair and complexion



made him look continually embarrassed, leaned forward. He tapped the console in front of him, so that he could bring up the *Ivoire*'s location.

It came up in a two-D image, partly because of the distance, and partly because Graham—the consummate professional—knew that Sabin preferred her long-distance views flat rather than in three dimensions. The best members of any bridge crew learned how to accommodate their captain's quirks as well as strengths.

She moved closer to the wall screen displaying the image. The ship, marked in shining gold (the default setting for the entire Fleet), showed up in small relief, traveling quickly. Like Coop had said, the *Ivoire* wasn't too far from the planet Ukhandā. Whatever was causing the crisis wasn't readily apparent from this distant view, but Sabin could tell just from Coop's voice that he had been under attack.

Coop was one of those men, one of those *captains*, who didn't ask for help if he could avoid it. Much as she teased him about this, she knew she fell in that category as well.

Sabin didn't have to tell Graham to zoom in. He did, more than once, until the *Ivoire* looked huge. Around it were at least a dozen other ships, so small and feathery that they almost seemed like errors in the image.

"What the hell?" said Second Lieutenant Megan Phan. She was tiny and thin, her angular face creased with a frown. She probably hadn't even realized that she'd spoken out loud.

Sabin doubted the other two had realized it either. Phan's words probably echoed their thoughts. In all her years in the Fleet, Sabin had never seen ships like that.

On screen, they looked too small to do any damage. If they were firing on the *Ivoire*, it wasn't obvious. But their position suggested an attack, and a rather vicious one.

"Let Captain Cooper know we're on the way," Sabin said to Graham.

"Yes, sir," Graham said, and sent the word.

The *Geneva*'s current rotation put it in the front line of defense for the Fleet, but the Fleet was in a respite period, which was why Sabin only had a skeleton crew on board. The Fleet had rendezvoused near an unoccupied moon. Six hundred of the Fleet's ships were engaged in maintenance, meetings, and vacations, all on a rotating schedule.

She'd been in dozens of respite periods like this one, and she'd never needed more than a few officers on the bridge.

Until now.

"Captain Cooper sends his thanks," Graham said, even though everyone on the bridge knew that Coop had done no such thing. Someone on his staff had. If Coop had done so, he would have spoken on all channels, just like he had a moment ago.

"We need other front line check-in," Sabin said. Technically, she wasn't the senior captain for all the front line ships on this shift, but no one took front line seriously during a respite period. Everyone had dinners and relaxation scheduled. Most bridges, even in the front line ships, were minimally staffed.

The only difference between a minimal staff in a front line ship and the other ships during a respite period was that the front line ships had top-notch crews manning the bridge, in case something did go wrong.

"Already done, sir," Graham said. "The captains are reporting to their bridges."

"What about our crew?" she asked. She felt almost embarrassed to ask. Graham was one of her most efficient crewmembers and she knew he had most likely pinged the bridge crew.

But she had to make sure—even in this respite period—that the crew was following protocol.

"Notified, and on the way," Graham said.

"Good, thank you." She sat in the captain's chair, and winced as the bow on the dress's back dug into her spine. A bow. What had she been thinking?



She knew what. The dress's tasteful blue fabric and demure front had caught her eye. But she had loved that bow for its suggestion of girlishness, something she wasn't now and would never be.

"Let's hear the check-in," she said.

Graham put the captains' responses overhead. In addition to the arrivals—all twenty—the captains seemed to believe it important to engage in a discussion of Coop's motives. A request for support was the lowest level request a captain could issue. Normally, a captain in distress asked for a battalion of a particular type, not a general support request of warships.

So it was curious, but it spoke more to Coop's conservatism than to the situation at hand. Besides, no one seemed to acknowledge that the *Ivoire* had gone to Ukhandia at the request of one of its nineteen cultures. The Fleet had agreed to broker a peace deal between the Xenth and the Quurzod, but didn't know enough about either to do a creditable job.

The *Ivoire*, which had the best linguists in the Fleet, had gone into Quurzod territory to learn more about that culture in advance of the actual peace conference three months away. The *Alta*, the Fleet's flagship, apparently believed that the Fleet knew enough about the Xenth to do more limited preparation.

It had only been a month since the *Ivoire* had sent a team to the Quurzod. Apparently things had not gone well.

She shifted, the dress's shiny fabric squeaking against the chair's seat. She wasn't sure she had ever sat in her chair without wearing regulation clothing—at least, since she'd become captain. As a little girl, she used to sit in her father's captain's chair on the *Sikkerhet*. This dress made her feel that young and that out of place.

Stupid chatter from the other captains surrounded her. They were still speculating on what Coop wanted and whether or not this was a legitimate request. They hadn't made the transition from respite to action. And there was another issue. Coop's message was low-key.

Only people who knew him well understood that he was worried.

"Open a channel," she said, unable to take the chatter any longer.

Graham nodded. Then he signaled her.

"Coop's asked for support," Sabin said in her most commanding voice. "Stop arguing about why, and haul your asses out there."

The chatter stopped immediately. She had a hunch she knew how the other captains had reacted: a straightening of the shoulders, a nod, a deep breath as they all gathered themselves, a momentary flush of embarrassment as they realized they had conducted themselves like people on vacation instead of captains on a mission.

She didn't like respite periods, so she didn't understand the vacation mindset. But a lot of these captains believed in relaxation, and believed the crap that the civilians on the various ships peddled, that a rested crew was a healthy crew.

She believed a practiced crew was an efficient crew.

She followed regulations, gave her staff the proper amount of time off, and no more.

Because this respite period was so long—months, really, as the Fleet prepared for the work around Ukhandia—she had her first officer, Charlie Wilmot, continually run drills. Each department had to run drills as well.

Her crew was going to remain the most disciplined crew in the Fleet. If a member of the crew complained, that complaining crewmember got transferred. Often, she'd trade that crewmember for someone on a different ship. She'd stolen more good officers from her colleagues' ships than any other captain. The good officers, she believed, were the ones who wanted to work, not party at every opportunity.

Wilmot had just arrived on the bridge. His uniform looked crisp and sharp. He



glanced at her dress and his lips turned upward just enough to register as a smile to anyone who knew him. Fortunately, no one else on the bridge watched him.

"The *Ivoire's* in trouble," she said. "Graham will catch you up."

Wilmot nodded, then walked to his station not too far from hers. As he did, he looked up at the screen, frowned, and glanced at her again. But he didn't ask anything, because she had already told him to figure out what was happening from Graham.

As if Graham knew. No one on the bridge did, and it was clear that no one on the other front line ships did either.

She tapped the right arm of her chair, bringing up the captain's holographic console. She'd designed this so she didn't have to move to another part of the bridge to get information.

Before she'd followed the captain's training route, she'd started in engineering. While she loved design, she hated the lack of control the engineering department had. Plus, she was a captain's daughter, and she had ideas from the start on the way a well-run ship worked.

Most of the ships she had served on were not well-run. So she had gone back to school, and had risen through the ranks until she got the *Geneva*. That was fifteen years ago. Even though she occasionally designed upgrades for her baby—upgrades that other engineers eventually brought to their ships—she hadn't really looked back.

She preferred being in charge.

Which was why, as the five other members of her team took their places on the bridge, she looked up those small, feather-shaped ships herself.

The ships weren't in the database, no matter how she searched for them. She searched by the ships' image, the design, and the area's history. She also searched through the images of Ukhandan ships, not that there were uniform ships on a planet that housed so many different cultures. Not all nineteen cultures were space-faring, but five of them were, according to the database, and those five had no ships like this.

Small, efficient, and capable of swarming.

She wanted to contact Coop, but she would wait. He would let her—and the other front line ships—know if something had changed.

She almost closed the console, when something caught her eye. She had images of the ships for five cultures, but the information before her contradicted itself. Five cultures had ships, but six cultures had gone into the space around Ukhandan.

The sixth culture, the Quurzod, were the ones that the *Ivoire* had gone to Ukhandan to study before the peace talks.

Her stomach clenched.

Clearly, something had gone very, very wrong.

"How far out are we?" Sabin asked Lieutenant Ernestine Alvarez, who was running navigation.

"Even at top speed, we're half a day away," Alvarez said.

Too close to use the *anacapa* drive with any accuracy. The *anacapa* enabled the Fleet to negotiate long distances. It put a ship in foldspace, and then the ship would reappear at set coordinates. The problem was that the ship would reappear blind—and in a battle situation, that wasn't optimum.

Plus, time worked differently in foldspace, and while the best crews could usually predict the time differences down to the second, sometimes even the work of the best crews went haywire. Engineers claimed the problem was with sections of foldspace itself; scientists believed the problem was with certain *anacapa* drives.

Even with centuries of study and upgrades, neither group could come to a complete agreement. In Sabin's opinion, the Fleet had forever messed with something it did not understand when it started using the *anacapa* drive.



She wasn't going to use it on something like this. Nor was she going to order the rest of the front line to do so—not unless Coop sent out a major distress signal, which he had not yet done.

She wasn't going to explain herself to her crew, but if she had to, she would tell them what she always told them—that portion of the truth that they needed to know. It was the same truth every time they considered using the *anacapa* drive. The *anacapa* put a strain on the ship and on the crew that Sabin couldn't quite quantify. She hated using it for that very reason, just like most of the captains did.

Which was probably why Coop hadn't used his drive yet. The *anacapa* also worked as a shield. The ship would jump to foldspace for a moment, and then return to its original coordinates. Depending on how the *anacapa* was programmed, the return could happen seconds later or days later, without much time passing on the ship at all.

"Another twenty-five ships have just left Ukhanda's orbit," Alvarez said.

"That settles where the ships are from, at least," Graham said.

"It was pretty obvious that the ships were from Ukhanda," Phan said. "The question is which culture controls them."

That *was* the question. It would have an impact on everything: how the front line ships would proceed, how they would fight back, *if* they would do more than simply rescue the *Ivoire*. If they needed to rescue the *Ivoire*. Coop might get away on his own.

Sabin hoped Coop would get away on his own.

She had asked Graham, "Have you sent a message to the *Alta*, asking if they know which culture owns these ships? Because we need to get some diplomats on the mission here, to ensure we don't make things worse."

The *Alta* was twice as large as all of the other ships in the Fleet, including the warships, and it housed the Fleet's government when that government was in session.

"I notified them as soon as we got Captain Cooper's message," Graham said. "I trust that they're monitoring the *Ivoire* as well."

Sabin was about to remind Graham that one should never "trust" someone else to do anything important, when Wilmot snapped, "Don't make assumptions, Lieutenant."

He sounded a bit harsh, even for him. Sabin glanced at him. That small smile had disappeared, and she saw, for the first time, how tired he looked. She wondered what he'd been doing during respite, besides running drills.

His uniform was so crisp she knew he had put it on right after the call to the bridge. So he'd been either asleep or doing something else when the call came in.

"Sorry, sir," Graham said, sounding just a bit contrite.

"I want identification on those ships," Sabin said. "We have time—half a day, you said. So let's see if we can cut that time short, and see if we can figure out who or what we're dealing with. The other cultures on Ukhanda are a mystery to me. Maybe they developed some technology of their own that we're not familiar with."

"Do you want me to send for Sector Research?" Meri Ebedat spoke up for the first time. She usually handled navigation, but she'd been doing some maintenance on the secure areas of the bridge during the respite period. She had a streak of something dark running along her left cheek, and her eyes were red-rimmed. Her brown hair had fallen from its usually neat bun.

She had to be near the end of her shift, although now she wouldn't be leaving. She was a good all-around bridge crewmember, and Sabin would need her as the mission continued.

"Yeah, do it," Sabin said, "although I doubt Sector Research knows much more than we do. We haven't had enough time to study Ukhanda. That was one reason the *Ivoire* was there."



"You think they did something wrong?" Wilmot asked her softly, but the entire bridge crew heard.

She knew what he meant: he meant had the *Ivoire* offended one of the cultures in a severe way.

But she gave the standard answer. "By our laws, probably not," she said.

He gave her a sideways look. He wanted a real answer, even though he knew the real answer. They all knew the real answer.

Had the *Ivoire*—or, rather, its on-planet team—offended one of the cultures? Clearly. And if Coop didn't act quickly, the entire ship might pay the price.

## 2

"Do you ever question it?" Coop had asked Sabin months before, his hands behind his head, pillows pushed to the side, strands of his black hair stuck to his sweat-covered forehead.

They were in a suite on Starbase Kappa. They had pooled their vacation funds for the nicest room on the base—or at least, the nicest room available to someone of a captain's rank. Sabin hadn't stayed anywhere this luxurious in her entire life—soft sheets, a perfect bed, a fully stocked kitchen with a direct link to the base's best restaurant, and all the entertainment the Fleet owned plus some from the nearby sector, not that she had needed entertainment. She had Coop.

They weren't a couple, not really. They were a convenience.

It was almost impossible for captains to have an intimate relationship with anyone once they were given a ship. Coop's marriage to his chief linguist—a marriage that began when they were still in school—hadn't made it through his first year as captain.

Sabin had never been married, and she hadn't been in love in decades. At least that was what she told herself. Because the people she interacted with on a daily basis were all under her command. She didn't dare fall in love with them or favor them in any way.

It wasn't against Fleet policy to marry or even sleep with a crewmember (provided both had enough years and seniority to understand the relationship, and provided both had signed off with all the various legal and ethical departments), but it didn't feel right to her to sleep with and then command another person.

It didn't feel right to Coop either. They'd discussed it one night, decided they were attracted enough to occasionally scratch an itch, and somehow the entire convenience had improved their friendship rather than harmed it (as they had both feared it might).

Ever since, they would communicate on a private link between their ships, and when their ships had a mutual respite period, they got a room and scratched that itch, sometimes repeatedly.

She had been about to get out of bed and order some food when Coop spoke. She had the covers pulled back, but his tone caught her, and she lay back down.

"Do I question what?" she asked, grabbing one of his pillows and propping it under her back.

"Our mission," he said. "Or at least part of our mission."

She felt cold despite the blankets and the perfect environmental setting. She hadn't heard anyone question the Fleet's mission since boarding school. At that point, everyone questioned; just a little. They were encouraged to.

"You don't believe in the mission anymore?" she asked, turning on her side to face him. If Jonathon "Coop" Cooper no longer believed in the Fleet, well, then the Fleet



might as well disband. Because the Universe had shifted somehow and the rules no longer applied.

"Part of it," he said. "Although to say that I don't believe might be too strong. Let's just say I'm worrying about things."

He didn't look at her. He was staring at the ceiling, which was covered with a star field she didn't recognize. Starbase Kappa was old, built by her grandfather's generation, and much of the base paid homage to places the Fleet had been almost a century ago. The Fleet usually liked to leave its past behind. Even the feats of bravery and the victories (large and small) became the stuff of legend, not something that the old-timers discussed as if they were meaningful events.

"What are you worrying about?" She propped herself up on her elbow so that she was in his field of vision.

He glanced at her, then smiled almost dismissively, and looked back up at the ceiling.

"What makes us so smart?" he asked.

She blinked, not expecting that.

"You and me?" she asked, thinking about their captains' duties.

He sat up, shaking his head as he did so. The blanket slid down his torso, revealing the dusting of black hair that covered his chest and narrowed on its way down his stomach.

Normally that would have distracted her, but his mood changed everything. She wasn't sure she had ever seen Coop this focused, even though she knew he was capable of it.

"Not you and me," he said. "The Fleet. We've been traveling for thousands of years. We go into a sector and if someone asks for help—or hell, if we figure they *need* help even if they don't ask—we give them assistance. We advise them, we make them see our point of view. We give them whatever they need from diplomatic support to military back up, and we stay as long as they need us, or at least until we believe they'll be just fine."

She'd been in hundreds of these kinds of conversations throughout her life, but never with another full adult vested with the powers of the Fleet. Always with children or teenagers or discontented civilians who traveled on the various ships.

Never with another captain.

"We never go back and check, we have no idea if we've done harm or good." Coop ran a hand through his hair, making it stand on end. "We continually move forward, believing in our own power, and we never test it."

"We test it," she said. "The fact that we've existed this long is a test in and of itself. We've been the Fleet for thousands of years. We've lived this way forever. We know the history of various regions. That's just not normal, at least for human beings."

"Because we never stick around long enough to be challenged," he said. "And we 'weed' out the bad elements, giving them crappy—and sometimes deadly—assignments or we leave them planetside someplace where we convince ourselves they'll be happy."

Her breath caught. Finally, a glimmer of what might have caused this mood.

"Did you have to leave someone behind, Coop?" she asked softly.

"No," he said emphatically, then gave her a look that, for a moment, seemed filled with betrayal. "Haven't you wondered these things?"

She hadn't. She wasn't that political. She stayed away from the diplomats and the linguists and the sector researchers. She didn't like intership politics or the mechanics of leadership.

She knew what she needed to know to run her ship better than anyone else in the Fleet—better than Coop, although she would never tell him that—and she left the rest to the intellectuals and the restless minds.



She had never expected such questioning from Coop. If anything, she found it a bit disappointing. She didn't want him to doubt the mission.

She had thought better of him than that.

She wasn't sure how to respond, because anything she said would probably shut him down. It might even interfere with the comfortable convenience of their relationship.

But he expected an answer. More than that, he seemed to need one.

"In my captaincy," she said after a moment, after giving herself some time to think, "the *Geneva* has never had an on-planet assignment. We've been front line or support crew or the occasional battleship. We don't get the diplomatic missions."

"You haven't thought about what we do, then," he said flatly.

"Not since school, Coop," she said, finally deciding on honesty.

"Not once? This mission from God or whatever is causing us to move ever forward, spreading the gospel of—what? A culture that we've never lived in and we are no longer sure existed?"

He sounded wounded, as if all of this were personal. She had to think just to remember what he was talking about. The Fleet had left Earth thousands of years ago, and supposedly did have a mission, to find new cultures and to help them or something like that.

She had never paid attention to mythology and history in school. She didn't think it pertained to anything she was doing.

She still didn't.

"I think," she said gently, "we have our own culture now. The Fleet doesn't live on planets or moons. Its world is the ships. That's what we are. The ships. And everything else is what we do to maintain our ships. We do explore, we do encounter other peoples, but that's not the Fleet's main job. The Fleet's main job is to maintain the Fleet."

He slouched in the bed. "Oh, hell, that's even more depressing."

"Why do you question?" she asked.

He gave her that betrayed look again, then threw the covers back.

"Why do you breathe?" he asked, and left the room.

### 3

"Captain," Graham said, "I managed to modify our visuals just a bit. Those little ships *are* firing."

Sabin stood so that she could see the screen better. She had assumed that the little ships were doing something to the *Ivoire*, but, she realized as she watched, she hadn't thought of it as *firing* on the larger ship for two reasons.

The first reason was that something that small couldn't have weapons that would damage the *Ivoire*—not individually, anyway, and to her, somehow, that meant that any shots those little ships did take would be harmless. The second reason she hadn't thought the little ships were firing was that the *Ivoire* didn't seem to be reacting as if it were being shot at.

Why wasn't Coop shooting back? He could blow those things apart.

But the modified view showed little rays of light, coming from the small ships and hitting the *Ivoire* with a flare. The light and the flare were clearly constructs that Graham had designed to make the shots visible.

Still, they seemed creepy and a little overwhelming, rather like being stung continually by tiny insects. Pinpricks in isolation were annoying. Continual pinpricks weren't just annoying, they became painful.



"Have those ships been targeting more than one area on the *Ivoire*?" she asked. The answer wasn't readily apparent from the images that Graham had designed.

"I don't know," he said, "but if they are, the *Ivoire*'s in real trouble. From what I can tell, those ships have a lot of firepower."

The weapons she understood, the ones that worked against great ships like these, required a lot of space and often their own power system away from the ship's engines. She had never seen ships so tiny with repeated firepower, the kind that could do damage on something like the *Ivoire*.

That wasn't entirely true. It was possible, if the ships gave up something, like speed. But these little ships kept up with the *Ivoire* and had powerful weapons.

"How is that possible?" she asked.

"I don't know," Graham said. "They're not like anything we've ever encountered before."

"And," Phan said, "they don't seem to be anything our various allies have encountered either."

"What about the Xenth?" Sabin asked. The Xenth weren't really allies, but they were the ones who suggested the brokered peace conference.

"I'm not getting anything from Sector Research," Phan said. "They're scrambling for information from the *Alta*. But they're not finding anything."

"Which might mean that there's nothing to find," Wilmot said.

He seemed unusually pessimistic. Sabin frowned at him. He didn't look at her. He was bent over his console, working furiously on improving their speed so that they could get to Coop faster.

"Captain." The single word cut through all the discussion. It was Alvarez. "Look at the *Ivoire*."

Sabin looked. It seemed to glow.

"Is that your effect, Perry?" she asked Graham.

"No, sir," he said. "That's the *Ivoire*."

Sabin had never seen anything like that before. "What the hell is that?"

The *Ivoire*'s glow increased and then the ship vanished.

"Tell me they activated their *anacapa*," she said, hoping she didn't sound as worried as she felt.

"They did," Graham said, "but I only know that because I just got a transmission from them a few minutes ago, announcing their intention to do so."

"That transmission should be simultaneous with the *anacapa*'s activation," Sabin said. "We should have gotten it as the *Ivoire* vanished."

"Yes, sir," Graham said, his tone speaking to the problem more than his words did.

"Keep this screen open, but show me what happened when that transmission was sent," she said.

Another screen appeared next to the main screen. On it, the ships—all of them, including the *Ivoire*—were in slightly different positions.

The little rays of light kept hitting the *Ivoire* in various places all over its hull.

"Dammit," Ebedat said.

"What?" Sabin said. She hadn't seen anything. But her eye kept getting drawn to the scrum of little ships left in the *Ivoire*'s wake. The *Ivoire*'s disappearance seemed to have confused them. Or maybe they were automatic, and unable to cope with a target that suddenly vanished.

"I think," Ebedat said, "and let's put an emphasis on 'think,' okay? I *think* that six shots hit the *Ivoire* as it activated the *anacapa*."

"That shouldn't cause a problem," Wilmot said.

"Not with weapons we understand," Ebedat said, "but these didn't show up on our system without some tweaking from Lieutenant Graham."



"Good point," Sabin said, wanting to shut down dissent while Ebedat had the floor.

"And look," Ebedat froze the frame, then went over to it and pointed. "Three of those shots hit the general vicinity of the *anacapa* drive."

"The most protected drive on all the ships," Wilmot said. "You can't hit the *anacapa* without penetrating the hull."

"Do we have proof that the hull was penetrated?" Alvarez asked.

"There's no obvious damage," Graham said.

Sabin frowned at it all. "We don't know what kind of weapons they're using. They might have penetrated the hull without damaging it."

"That's not possible," Wilmot said.

"Most cultures would say the *anacapa* isn't possible either," Sabin said, "and almost everyone we've encountered hasn't figured out that foldspace exists."

The bridge was silent for a moment. The second screen's image remained frozen. On the first screen, the little ships swarmed the spot where the *Ivoire* had been, almost as if they were trying to prove to themselves that it hadn't become invisible.

"The *anacapa* couldn't have malfunctioned and created that light," Wilmot said, but he didn't sound convinced.

"We don't know if that light came from the weapons," Sabin said. "The *Ivoire* is probably in foldspace right now. Did Captain Cooper send us a window? How long does he plan to be in foldspace?"

"That part of the message was garbled," Graham said. "Give me a moment to clean it up."

"How long would you remain in foldspace, Captain, if this were happening to the *Geneva*?" Phan asked.

"The *Ivoire* knew support was half a day out," Sabin said. "That would seem like a blip in foldspace. They could return without worrying about the little ships."

She hoped that was what Coop had done. Just because one captain would do it didn't mean another would. It was logical, though. And then they could all take on the problems caused by those little ships.

"They'll also get a chance to assess damage," Wilmot said, "and maybe recalibrate their own weapons to take out those little ships."

Sabin frowned. Coop hadn't fired on those ships, that she had seen anyway. Maybe he had other reasons that he couldn't do so. Maybe his weapons systems weren't working. Maybe he already knew that the weapons had no effect on those little vessels.

"He planned a twenty-hour window, sir," Graham said. "At least I think that's what the *Ivoire*'s message said. I'm coordinating with several others in the front line. We'll let you know if that estimate is wrong."

"It sounds right to me," Sabin said. "It gives the *Ivoire* enough time to do some work on its own and it gives those small ships enough time to give up on the *Ivoire* and think it gone."

"And it also gives enough time for us to arrive," Wilmot said.

"Is he leaving this mess for us to clean up?" Phan asked, a bit too bluntly.

But Sabin knew what she meant. "The Fleet is operating diplomatically on Ukhanda. Once fire is exchanged, diplomacy ends."

"Yeah, so why wouldn't we fire?" Phan asked.

"I mean, once *we* fire, diplomacy ends," Sabin said.

"So we're supposed to take it when someone shoots at us?" Phan asked.

Had Phan never been in a battle? Sabin couldn't remember. It had been a long time since the *Geneva* had been under fire.

"Sometimes," Sabin said. "But we're generally not a diplomatic ship. Captain Cooper's weapon components would be different for this mission, and his orders would be constrained."



"Twenty hours," Wilmot said, clearly wanting to change the conversation. Protecting Phan? Sabin couldn't tell. "Does he want us there early to take the action he couldn't take?"

"He probably wants the show of force," Graham said. "It's one thing for a bunch of tiny ships to go after a large ship. It's another to face twenty ships from our front line."

Graham had a point. And Sabin had a job to do. She had to get her ship to that location, but she also needed clear instructions from the *Alta*. The diplomatic mission might be important or it might be something that the front line could scrub.

"I'm going to change," Sabin said, "and while I'm in my cabin, I'm going to see if I can get clear orders from the *Alta* on what we need to do when we get to Ukhandia. The last thing we need to do is blunder our way into a crisis."

Phan looked at her, expression serious. This time, however, Phan didn't say anything.

Wilmot was still staring at the screen as if he were trying to understand it.

"For the moment, Charlie," Sabin said to him, "you have the comm. Notify me if anything changes. And do your best to get us to that spot as fast as we can go, would you?"

"Yes, sir," Wilmot said.

She tugged on her bracelet as she left the bridge. To tell the truth, she was relieved that the dinner wouldn't happen. She liked action. She liked doing her job, not talking about trivial things.

She was worried about Coop, but he could take care of himself.

Her most important job now was to make sure the *Geneva* didn't screw up the Fleet's plans for the region.

She needed guidance, and she needed it now.

4

It only took Sabin a few minutes to remove the dress and put on her uniform. Her uniform felt like a second skin to her. She glanced at the bed, her dress with its bow and fancy fabric splayed on top of the coverlet, and wondered what she had been thinking. She expected her crew to be prepared on front line.

She should have been, too.

Her quarters were the largest on the *Geneva*, not because she reserved the best for herself, but because regulations insisted. She had to put up with a certain amount of ceremony as captain, and she didn't like it any more than she liked the dress.

But she appreciated her quarters this evening. Because, unbeknownst to most of the crew, the captain's quarters had a back-up control area, along with its own private communication network. And to get into that area took several layers of identification and approval. Once she was inside—alone—no one else could get in without even more identification and approval from her.

The area was just off her bedroom. A panel in the wall hid the entrance to the back-up control area.

She finger-combed her hair, then went through the various protocols that opened the panel. It slid back, revealing a small space that looked more elaborate than the back-up controls in engineering. In addition to the back-up navigation, piloting, and weaponry, there was an entire console for communications.

She closed the panel, then settled in, facing the communications console. This was where she had usually contacted Coop. In fact, he was the person she spoke to the most from this room.



It felt odd not to contact him at all.

The thought made her just a little shaky. She wasn't sure why she was so on edge about his message, even though her counselor at the academy would tell her why she was. He would have said that it had to do with her father.

Sabin set that aside.

She took a deep breath, feeling the calm she was known for descending on her.

She put a message through to Command Operations on board the *Alta*. Command Operations guided the Fleet. It was an organization of top-ranked officials, most of whom had served with distinction as captains of their ships once upon a time. They were the ones who essentially ran the Fleet.

There was a civilian government, but because the Fleet's origins were military, the power structure remained so. The civilian government took care of general management and often took care of diplomatic relations, but in situations like this one, Command Operations took charge.

Sabin identified herself, and then she said, "I realize I'm not senior captain for the front line, but so far, the senior captain hasn't checked in."

And she hoped that message got through: the front line's senior captain was so far away from his duties that he couldn't come to a support request in a timely fashion.

"We're heading toward the *Ivoire*'s position as per Captain Cooper's request. We'll be there in less than twelve hours. But we all have some questions about the mission."

Finally the screen across from her winked on, revealing the faces of several members of Command Operations. She had met two, including General Zeller, who had been the first to question her abilities to captain, more than twenty years ago. The other three faces looked familiar, of course, and even if she hadn't known them by reputation, the listing of names and credentials below their images would have helped her understand who she was talking to.

The faces seemed to float against a black background. Long ago, Command Operations had established its communications imagery to show only the pertinent information and nothing more. In conversation with a captain, only the faces had been deemed pertinent.

"Your mission or Captain Cooper's?" asked General Nawoki, the other person that Sabin had met personally. She barely knew General Nawoki, although she admired Nawoki's military record. Nawoki was one of the few officers who had defended her ship—with no loss of life—in a four-day prolonged battle after her *anacapa* had broken down. At one point, overrun by the enemy, she managed to stave off boarding and ship capture by reengineering half the lifepods into weapons.

"I'm interested in both missions," Sabin said. "According to what little we saw of the attack, Captain Cooper did not fire on the ships. Speculation from our Sector Research team is that these ships are Quurzod, and we know that the *Ivoire* was on a pre-diplomatic mission to the Quurzod. I need to know—the entire front line needs to know—if we're not to fire on those ships, or if the diplomatic mission is off."

The members of Command Operations did not look at each other—that she could tell, anyway. She had no idea how the cameras were set up in Command Operations. She didn't even have a high enough rank to enter the level on the *Alta* that housed Command Operations, let alone ever go into the room.

"Anything else?" Nawoki asked.

"When we arrive," Sabin said, "who runs the mission? The front line commander or Captain Cooper?"

"Why do you care now?" Zeller asked.

Sabin glanced at him. His face had more lines than it had when she was in school, but his eyes remained the same. Steel gray, flat, and cold. She had tried not to hate



him back then. Given the resentment she felt now as she looked at him, she wondered if she had been successful.

"It will make a difference as to how we plan our response. A cursory study of the ships on front line tells me that none of us have the kind of diplomatic experience that the crew of the *Ivoire* have, and if this is still a diplomatic mission, then—"

"We will get back to you," Nawoki said, and the images vanished from the screen. The contact had been severed.

Sabin stood and let herself out of the room, leaving the panel open in case Command Operations responded immediately. She didn't want anything to record the expression that she had barely been able to keep off her face inside during the meeting.

She knew why Zeller had asked her why she cared now. The bastard thought she was panicking. Even after fifteen years of exemplary command, he thought some ship slipping into foldspace made her panic.

Then she let out a long breath. Maybe she was misjudging him. Maybe the problem was something else entirely, a diplomatic problem that no one in Command Operations could discuss in front of her.

She stretched, trying to relax her muscles, and willed herself to focus on the moment.

The past did not matter, whether it was her past relationship with General Zeller or the disappearance of her father.

What mattered was this mission, and how she would handle it. How her crew would handle it. How the front line would handle it.

And whether or not they would imperil a diplomatic mission.

And if anyone in Command Operations asked her about her reasons for asking questions, she would not be defensive. She would answer honestly. She would tell them she wanted to do what was best for the Fleet.

Because she did.

## 5

Her first encounter with George Zeller had come more than two decades before, when he was still a major. He reluctantly ran the counselors in the evaluation section of the academy's officer training program and, she later learned, he had taken no interest in the psychological evaluations or their necessity until she enrolled.

Correction: until she enrolled and did well.

Then, apparently, Major George Zeller made it his business to prove that she wasn't fit to command anything larger than an engineering staff on a third-class Fleet vessel.

He had been younger then, not just in age or experience, but in manner. He had red hair and green eyes that flashed when he was angry, which to her, seemed like all of the time.

He was the one who mentioned her father's disappearance to the academy staff, he was the one who believed that disappearance would cause problems, and he was the one who insisted on psychological training so rigorous that Sabin had to go without sleep for days to complete the testing and her schoolwork. When she complained to the head of her department, he moved the testing to dates between the school terms, enabling her to at least get some rest.

She always tested well, but Zeller kept accusing her of gaming the system. She finally reported him to his superior, one Colonel Gaines, who would eventually disappear himself in an *anacapa* accident two years later. She never quite got over the irony of that; Zeller never got over the fact that she went over his head.



He might have overcome it, had she failed in Officer Training, but she had graduated first in her class, with high honors, the only person in twenty years to get a perfect score on all of the final term tests—including the physical ones.

She never quite figured out what Zeller had against her; other students had lost parents to accidents, disappearances, and explosions, and Zeller had never taken an interest in them.

Just her.

It wasn't until years later, after she had become a captain, that she found a reference to Zeller in her father's file. The record itself was mostly redacted. What did exist was deliberately vague.

After that discovery, she told herself that Zeller's reactions to her came from survivor's guilt, but she never really wanted to test that theory. So she avoided him whenever possible.

In fact, she had avoided him for more than a decade.

Until now.

## 6

A soft, almost inaudible cheep let Sabin know that the screen had activated. She slipped back into her chair, letting the panel close behind her.

Only one face floated in the blackness—that of General Nawoki. She looked tired, but Sabin didn't know if that was her natural state.

"We are getting conflicting reports from Ukhanda," Nawoki said. "The Xenth claim that the Quurzod killed all but three of the team members the *Ivoire* sent to the Quurzod. The Quurzod claim that the *Ivoire*'s team violated Quurzod law and declared war. Word from some of the other cultures on Ukhanda is that the Quurzod are quick to take offense and even quicker to use violence to punish the offenders. Unfortunately, the *Ivoire* herself has not sent us their report on the incident, so we have no way to assess the truth of the interaction. In other words, hold back until the *Ivoire* returns from foldspace, and let Captain Cooper lead the response."

It sounded like a mess and reinforced to Sabin, yet again, that she wanted nothing to do with actual diplomatic missions.

"Captain Cooper said he would keep the *Ivoire* in foldspace for twenty hours. We'll arrive eight hours before he returns. Should we stay out of the area until we have word of the *Ivoire*?"

Nawoki's lips thinned. She glanced over her shoulder at someone or something that Sabin could not see. Either Nawoki disagreed with the command she was about to give, or she was giving that command over the disagreements of others.

Sabin had no way to know which was true, only that Nawoki seemed as uncomfortable about the situation as Sabin felt.

"If those small ships remain, then stay out of the area," Nawoki said.

"And if they show up after we enter the same area?"

"Try to ascertain whose ships they are. See if they will negotiate or explain their position."

Sabin's breath caught, and she had to struggle to hold back her initial reaction. She had hoped that Command Operations had known who those ships belonged to.

"Do we have any theories as to where those ships originated?" she asked.

"The Xenth say they are Quurzod ships, but our other sources on Ukhanda cannot confirm," Nawoki said.

"And forgive me, sir, but why aren't we trusting the Xenth?"

"Because we are getting conflicting signals from them. They claim they want



peace with the Quurzod, but they are building their own military. Our Sector Research Team is also locating some evidence that the breaches of previous agreements might have come at the instigation of the Xenth rather than through the general warlike nature of the Quurzod."

Coop's voice echoed in Sabin's mind: *Do you ever question it? Our mission. Or at least part of our mission. What makes us so smart?*

"Were we planning to broker on the side of the Xenth?" Sabin asked, feeling like Phan—naïve and a bit out of her depth, and hoping that the General wouldn't notice or would take pity and answer her.

"We believed we could bring peace to Ukhandia," Nawoki said primly.

*What makes us so smart?* The memory of Coop's voice floated through Sabin's mind. She had to concentrate to keep his doubts from infecting her.

"We believed, sir?" she asked.

"Something went wrong, Captain," Nawoki said. "And after we recover the *Ivoire*, we will figure out what that something was."

## 7

The rest of the trip to the Ukhandan part of the sector was uneventful. Captain Seamus Cho of the *Bellator* finally took over his role as commander of the front line. He had, apparently, been holding a bachelor party for a crewmember and hadn't heard the summons in all the ruckus.

In Sabin's opinion, Cho did not seem concerned enough about the *Ivoire* or the situation near Ukhandia. But he was operating under the same orders as Sabin's, and so she knew he would at least wait, the way she would have, for the *Ivoire* to reappear.

Coop would be sensible, and he would know what to do.

As the front line approached an hour sooner than planned, the small ships remained, patrolling the area as if they expected the *Ivoire* to return.

Most ships with strong sensors left a fighting region shortly after a Fleet ship disappeared. The sensors would show that the Fleet ship had left somehow and was not cloaked. Even ships that had poor sensors would get the message after eleven hours.

Either these small ships knew how the Fleet used their *anacapa* drives or the commanders of those ships were extremely stubborn, holding that small region of space as proof that they had conquered it.

Cho ordered the entire front line to remain just outside of standard sensor range—close enough to join any fight should the *Ivoire* return suddenly, but far enough away for a battle to be a struggle for any ships with planetside bases.

Finally, after eighteen hours, the small ships gathered into a V-shaped pattern and headed back toward Ukhandia. The entire front line tracked them, but did not see the ships go back to a base on the planet. Instead, they went past Ukhandia toward a small satellite that looked like it was part of an uninhabited sister planet.

Cho should have sent a ship to investigate, but he didn't. He believed their mission was to rescue the *Ivoire*, not to pursue the *Ivoire*'s attackers.

Sabin couldn't argue with him. She might have made the same call herself, had she had command of the front line. It seemed as if Cho was as leery of getting involved in any diplomatic incident as she had been.

Finally, thirty minutes from the twenty-hour mark, he ordered the front line to prepare to defend the *Ivoire*. The front line would move slowly forward, not enough to attract attention from Ukhandia, but enough to get them in better range of the *Ivoire*.



They had covered half the distance to the *Ivoire's* last location when twenty hours came.

And went.

No one panicked. The *anacapa* drive could be finicky, and all the captains had miscommunicated or misestimated their time in foldspace at one point or another.

Twenty-one hours passed.

Then twenty-two.

And finally, the front line got nervous.

Cho gave the standard search orders. A standard three-dimensional search pattern should have used twenty-four ships, but the front line didn't have that many. Besides, a few had to remain in position, in case the *Ivoire* returned later.

Cho assigned sixteen ships to the grid search, and left three ships in a waiting position. The fourth ship would go to an area not too far from the *Ivoire's* return site—close enough to be a bit dangerous, but far enough to prevent most collisions from happening.

That ship would be the most vulnerable: if the *Ivoire* returned to slightly different coordinates and the other ship's failsafes did not work, the ships might collide. But it was a standard risk at this point in delayed *anacapa* response.

Cho contacted Sabin before making the assignment. He used a private channel so that the other ships couldn't hear their conversation, even though the bridge crew could.

He turned up on her screen, tall and stately in his uniform. He had zoomed out the image so that she could see his entire bridge crew, who looked as busy and focused as hers.

"I want to assign you to the on-site investigation spot," he said. "You have the most experience. However, General Zeller told me that you might not want the task. I don't believe in taking one person's word for another's possible reaction, especially when the other person is available. You're the best person for the job, Tory. Do you want it?"

"Of course I do," she said, keeping her voice calm. The momentary flash of annoyance at Zeller's name and remark had already faded. Zeller was a problem for another day. "Do you want me to do a grid search or an area search?"

"See if you can find traces of the *Ivoire*," Cho said. "Barring that, see if you can figure out exactly what they did."

Something in his phrasing seemed strange to her.

"Don't you think they used their *anacapa* drive?" she asked.

"I do, but I've never seen one take so long to engage, and I've never seen a ship light up like that," he said. "I'm worried that they disappeared, not because of the *anacapa* but because those little ships used a weapon we don't understand."

Sabin felt chilled. She hadn't even thought of that possibility. In that case, Coop—and his entire crew—were already dead.

But she shouldn't guess. Guessing was the enemy in any search for information.

"If those ships used such a powerful weapon," she said, "why would they have remained in the area?"

"I don't know," Cho said. "I don't think they would have. But I can't rule out anything at the moment. We need to search."

She agreed. "I'll do my best to figure out what happened here," she said. "I'll let you know when we have news."

She had almost said *if we have news*, and had caught herself just in time. Normally, she wasn't a pessimist, but something was odd here, something she could feel but couldn't see.



She wasn't usually a gut commander. She liked facts and hard information. But she also knew that sometimes hard information took too much time to acquire and gut became important.

She hoped this wasn't one of those times.

8

On the day her father disappeared, they pulled Tory Sabin out of class on the *Brazza* and took her to the observation deck. She always remembered it as "they" because try as she might, she couldn't remember who took her from class, how she got to the observation deck, how many people spoke to her along the way, or what anyone expected of her.

She was all of thirteen, precocious and opinionated, one month into her new school—a boarding school, which was unusual at her age. Boarding school for most students started when they qualified for the final four years of mandatory education. She tested way ahead of her peers, and so got assigned to a special school for children her age who were on a fast-track.

Her father was proud of her. No one had bothered to tell her mother.

But someone had told her mother that Sabin (whom everyone called Tory back then) was alone on the *Brazza*, waiting for news of her father, because her mother swooped in as if she would rescue everyone.

Her mother always wore impractical flowing garments, the kind of thing that confirmed she wasn't, nor would she ever be, part of the Fleet's military structure. She was an artist who worked in fabric. Her art changed each time she visited a new culture or planet, so her work became quite collectible among a certain group in the Fleet. She couldn't replicate patterns or materials once she ran out of whatever she had purchased in her (actually, the Fleet's) travels, so her pieces became—of necessity—limited editions.

Tory hadn't seen her mother in more than six months, even though the ship her mother lived on, the *Krásný*, never left the Fleet on any kind of mission. Most of the Fleet's civilians ended up on the *Krásný*, partly because the military presence was smaller on that ship. The ship specialized in environments and environmental systems, and that included the interior design that kept the people on board all of the ships entertained, stimulated, and sane.

Her mother sat beside Tory on a bench in the center of the room, enveloping her in lavender perfume. The bench was built so that the occupant had a three-hundred-and-sixty-degree view of the space outside. Plus the domed ceiling was clear so that she could see everything above her.

Tory wanted to slide away. Her mother's perfume was overwhelming, but more than that, her mother's golden gown was made of some kind of shiny but rough fabric, and just being near it made Tory itch.

"They don't understand the *anacapa*, you know," her mother said conversationally, as if they'd been talking all along. No hello, no hug, no how-have-you-been, or even a comforting he'll-be-all-right. Nothing. Straight into the old arguments, with Tory standing in for her father. "It's dangerous to use them, and your father promised, back when we married, that he never would—"

"Fortunately, you're divorced," Tory said and stood up, arms crossed. "He's overdue by five hours. That's all, Mom. You can go back to whatever thing you're designing. I won't be mad at you. *I'm* not worried. Daddy's good at his job."

Her mother stood, and this time, wrapped her arms around Tory. Tory thought of elbowing her mother hard and viciously so that her mother would never hug her



again, then suppressed the response and squirmed out of the older woman's embrace.

"They don't remove a child from school or contact her remaining parent because they think this is routine," her mother said—so not comfortingly.

"I'm smart enough to know that, Mother," Tory said.

"They think you need me."

"They're wrong." Tory stepped closer to the observation window. "Daddy will be just fine. The *Sikkerhet* will return, and he and I will get on with our lives. *Without you.*"

Her mother tilted her head just a little, a dismissive *you can't mean that* look she had used as long as Tory could remember.

"I divorced him, not you," her mother said.

"Funny," Tory said, "I couldn't tell."

"I contacted your father about a visitation schedule. He never responded," her mother said.

*On purpose*, Tory almost said but didn't. He wanted to see if Tory's mother would push the visitation, wanted to see if she would make contact, if she would hire a lawyer to enforce the terms of the shared custody.

Her mother had done none of those things. In fact, she hadn't even done what was on her schedule—a series of internship calls that were supposed to happen every Friday night. Instead, she'd send apologies, usually about work-related distractions, and finally, she stopped apologizing altogether.

Tory's father had been surprised; he had thought Tory's mother was a different person, maybe from the beginning. Tory attributed his blindness to both love and to the fact that he hadn't spent much time with his wife once he got on a career track. It was only after he kept finding Tory on her own, in the engineering and maintenance areas of the ship, at an age when the crew would report Tory's appearance (because it was dangerous) that he finally realized his family couldn't stay on the ship when he had an actual mission.

When he broke that news to Tory and her mother, her mother had shrugged and said they would move to the *Krásný*. Tory had burst into tears, begging to stay, and her father, for once, had listened. Not that he could have missed the campaign. Because others on the ship said that Tory shouldn't—couldn't—stay with her mother. Not and have actual parental care.

"What happened between you and Daddy isn't my business," Tory said. "I—"

"It is your business, darling," her mother said. "If your father had—"

"I don't want to discuss it. In fact, I don't want you here. Daddy will return, and I'll be fine, and even if I'm not fine, you're not the kind of person who can take care of anyone. If you don't leave right now, I will."

Her mother stared at her as if Tory had betrayed her.

"You need me right now," her mother said. "I thought you were smart. No one misses an *anacapa* window without a reason, a serious reason. In the history of the Fleet, those who miss the window by an hour or more usually do not return. You have a scientific brain. You should understand—"

"Shut up," Tory said, her hands balled into fists. "Shutupshutupshutup."

"Tory—"

Tory waved her hand at her mother, effectively silencing her. Then Tory shook her head, and ran for the door. Tory had no idea where she was going to go—if she went back to her room, her mother would find her—but she had to get away.

Just like she had to get away when she was a child.

And like she had when she was a child, she found herself heading toward engineering, the only place on any ship with concrete answers.

The only place she had ever felt safe.



Sabin's search found evidence that Coop had used the *anacapa* drive. Sabin was relieved and not relieved at the same time. In fact, she couldn't remember a moment when her emotions over one event had been so mixed.

The fact that he had used the *anacapa* proved that those small ships didn't have some kind of miracle weapon that destroyed the *Ivoire*. But the fact that he used the *anacapa* and wasn't back in the same spot at the time he had mentioned meant he was in trouble.

Sabin's mother had been right all those years ago: those who missed the window by an hour or more usually did not return.

Sabin sent the information to Cho and asked if he wanted her to contact all the sector bases still in operation. Sometimes a ship having trouble with its *anacapa* wouldn't show up in the spot it was supposed to; it would instead go immediately to the nearest sector base for repair.

The fail safe also took ships to sector bases, usually the most active one. If the crisis had been really bad, no one at the base would have thought of contacting the front line—if, indeed, the base even knew that the front line had moved.

Cho promised to check, and after he did, he requested a private audience with her. He wanted to talk to her nowhere near her crew or his.

She didn't think that unusual. She thought it sad. Because she knew part of what he was going to say.

Her ship had a small communications area just off the bridge. She had built that as well, for moments just like this one. When she thought about it, she realized she had made major modifications to every single ship she had served on, and on none more than the *Geneva*.

She slipped inside the communications area. It was larger than the one in her cabin. Ten people could fit in here comfortably, even though, if she needed that many people to hear something, then they would usually go to the conference area or listen on the bridge.

The communications into this section of the ship were scrambled and encoded, more private than anything else on the *Geneva*.

Screens covered all the walls. Everything could become holographic if needed, but she never used that feature. The table in the middle of the room felt out of place. She didn't sit at it.

Instead, she leaned on it, and contacted Cho.

He showed up on the screen in front of her, in a room similar to her own. His ship had been redesigned after she made modifications to hers.

Cho looked tired. Some of that might have been because of the bachelor party and the change of focus, but some of it was a man trying to cope with hard news, news that upset him, news he wanted to treat dispassionately, even though it was impossible.

"You think they're dead," she said without introduction. She had almost said, *you think he's dead*, which was an insight into her own mind that she didn't want and she certainly didn't want Cho to hear.

Either she thought Coop was dead, or she feared it, or she cared about it too much. After all, there were more than five hundred souls on that ship. She should care about all of them equally.

"What I think doesn't matter," Cho said, which was clearly his version of yes. "They haven't shown up at any of the active sector bases or starbases. The *Alta* tells me that experts have pinged the older sector bases, and there's been no activity, at least activity that has appeared in the logs. Experts tell me that they shouldn't have gone



back to sector bases that the *Ivoire* hasn't used in the past twenty years. The double-check was a long shot."

She knew that. No ship had shown up on old decommissioned sector bases unless that ship had used or visited the sector base some time in its recent history.

"The *Alta* wants us to do a few things," he said. "They want us to wait until the *Taidhleoir* arrives. They're the ones who will handle the situation on Ukhandia."

The *Taidhleoir* was another ship that specialized in diplomatic missions. It wasn't as top of the line as the *Ivoire*, but it would do.

"They figured out then who the ships belonged to?" Sabin asked.

"The Xenth say that the ships are Quurzod, but the Quurzod aren't acknowledging anything, and apparently the *Alta* can't confirm. It's a mess, and they don't want us in the middle of the diplomatic part of the mess. The front line has to remain, though. The show of force is going to show everyone on Ukhandia that the Fleet isn't to be messed with."

"Even though someone probably thinks they successfully harmed one of our ships," she said, more to herself than to Cho.

"Even though," Cho said, in the tone that captains used when they didn't approve of the path their higher ups were taking. "They also want us to do some investigating along the trails left by the small ships and near that spot where the *Ivoire* lit up so oddly."

"I have been," Sabin said.

"Not for an indication of *anacapa* use, but to see if there are other energy signatures that we're unfamiliar with, or maybe even ones we are familiar with. In other words, they want our investigators to figure out what those ships were attacking the *Ivoire* with."

"Reverse engineer it?" she asked. She'd been part of teams that had done such things in the past. They were usually used in war situations, when one of the participants had developed a new weapon. "We can't just ask someone on Ukhandia or capture one of the ships?"

Cho shrugged, and he looked away for a moment. When he glanced back at her, his dark eyes held sadness and something else. Frustration? She didn't know him well enough to be able to tell.

"They think something really bad happened on that planet," he said, "and they believe it's going to take some work to deal with it. Work we can't do in a time frame that will enable us to rescue the *Ivoire*."

If they could rescue the *Ivoire*. He didn't even have to add that part for her to hear it.

"You didn't have to tell me all this in private," she said. "You know our bridge crews could have kept this quiet. What else is there?"

"I wanted you to make a choice. Not your crew, not the *Alta*. You." Now his gaze met hers, and she almost felt him in the room. He was scared. She rarely had that thought about other captains, and she had never seen such emotion from Cho. Not that he was showing much now. His mouth had thinned a bit. Anyone who didn't know him would have thought he was just a little more concerned than normal, a little preoccupied.

But she could feel it: He was scared.

Was he scared of her response? Or something else entirely?

"Here's the thing, Tory," he said, his tone confidential. "I talked to some of the generals directly. We all know that time is of the essence in tracking a lost ship in foldspace. But General Zeller wants us to wait until some of the foldspace investigative and rescue ships arrive. He doesn't trust you."

Of course he didn't. He hadn't from the moment he met her.



"Trust me to what?" she asked, although she had a hunch she knew.

"Search foldspace." Cho spoke tersely as if he wanted to get this part of the conversation over with. And as she was about to respond, he added, "I don't understand it, Tory. You're the one who developed the search method that we've used for the past thirty-five years. You're the one who understands it the best. I know you and Zeller have issues, and I assume it's none of my business—"

"He thinks I'm too emotional about this," she said. "And you know, on this one thing, he might be right."

## 10

Older than her years, brilliant, and obsessed. That was what Sabin's evaluations all said. She had hacked into them on the night before the very first test mission began.

Her years were all of twenty, too young to do much in the Fleet, but old enough to be considered an adult. She had already gone to two boarding schools. She had worked her way through some of the most difficult engineering degree programs in the Fleet, plus she had done some work with the Dhom, an advanced culture that they were lucky enough to find two years ago.

The scientists there taught her things about dimensional theory that no one in the Fleet had contemplated before. After they heard the Dhom scientists, some of her professors postulated that the Fleet had lost a lot of its research into dimensional theory. The professors claimed that the *anacapa* drive couldn't have been developed without it.

Some of her professors were a little naïve, in Sabin's opinion anyway. She could have identified a dozen points in the history of science and technology, points she knew, where something got developed accidentally and no one quite knew how it worked.

Granted, however, such things rarely inspired confidence, and she didn't need to explain that there were parts of her theories that were just guesses as well. Guesses based on research, but as she could have told anyone who listened (as she would argue sometimes inside her own mind), theories needed testing before they became quantifiable.

Her test missions were the transition between theory and fact. Or, at least, between narrower, more apt theories, and something approaching fact.

What she couldn't admit to anyone—not her mentors, not the professors, not the captains running the ships that would take these risks—was that she really didn't care about ancient history, *anacapa* development, or even dimensional theory.

She cared about finding her father and his crew.

And if her theories were right, then even now, she might find them, trapped in foldspace for only a few hours or days. Even if seven years had gone by for them, as those seven years had gone by for the Fleet, she might still discover some remnant of the ship. Maybe the *Sikkerhet* had gone to a nearby planet and settled. Maybe it had simply refueled and waited, trying to figure out how to return to what the Fleet called "real space," which was the current space and time.

The one thing the Fleet had done was build a long-term future trajectory. The Fleet knew where it was going. It was heading into what, for it, was uncharted space. It had advance ships to either map the area or to double-check the maps provided by the locals of the sector the Fleet was currently in.

The only thing uncertain in the Fleet's map was the timeline. The Fleet had none. It would spend months near some planet, learning the culture. It would spend years helping a new ally fight a war.



If her father knew the trajectory, he might be waiting for the Fleet *ahead* of where the Fleet currently was. She doubted that, though, since the *Alta* had sent large ships as well as exploratory vessels ahead, searching for the *Sikkerhet*.

If her father had gone too far into the trajectory, she might never see him again. The version of the Fleet that greeted him or the descendants on his ship might be populated by her grandchildren's generations—if, indeed, she ever had grandchildren.

The method she had devised, the method that ultimately got tested, was a three-part grid search inside foldspace. The Fleet had never done foldspace grid searches for lost ships before, not in all the millennia of its existence.

Part of that was a simple disagreement as to what foldspace was. Some theorists believed that foldspace was a different point in time—the future, the past—somewhere else. But a lot of the practical military, those who'd actually flown into foldspace through their *anacapa* drives, didn't believe that.

The star maps in foldspace were significantly different than the star maps from the area where the ship had left. It usually took something catastrophic to change star maps in the same area—not even the explosion of a planet would change a star map so drastically as to be completely unrecognizable.

So most theorists believed that foldspace was either an alternate reality that somehow the ships tapped into with the *anacapa* or a fold in space, an actual place that the ships could somehow access.

What Sabin privately believed was that the *anacapa* sent a ship far across the Universe, into another galaxy altogether, and then back again. But the scientists told her that the *anacapa* didn't have the energy for that. Nothing did.

Which left her with dimensional theory. One of her professors claimed that foldspace was another dimension, one that hadn't yet been charted and wasn't understood. Some of the work done by the scientists on Dhom pointed to that theory being correct.

She had been contemplating all of that when she realized that none of it mattered. *What* the ships went into wasn't important. What it *seemed like* was.

And what it seemed like was a sector of space like all other sectors of space, except for the different star maps. Except for the fact that none of the equipment that the Fleet had could track the ships down in that sector of space. None of the equipment that any other culture had could track those ships either.

So she decided to do what all the scientists of the *anacapa* had done before her—not question how it did what it did—but accept the reality that it worked.

In that reality, the ships went somewhere that looked like this reality.

And those realities could be searched.

If she could find the right point in foldspace, the same entry point that a missing Fleet ship had taken.

The same entry point that the *Sikkerhet* had taken.

The same entry point that her father had taken—and disappeared.

## 11

"Oh, come on," Cho said in a tone she'd never heard him use before. "Zeller's unreasonable. Everyone knows that. They're just waiting for him to retire."

Sabin blinked at him, forcing herself to come back for a moment from her own past. A quick escape in her own mental foldspace.

The small control room was hot. She pushed a strand of hair off her face, and resisted the urge to smile grimly. Cho was staring at her with something like sympathy, which she would not have expected from him.



"I know they're waiting for him to retire," she said. "They think he's old-fashioned. But he's not entirely unreasonable."

Cho frowned. He looked like he was about to disagree, when she said, "He's lived through a lot, Seamus. Sometimes we don't respect that enough."

"I can't believe you're agreeing with him, after the way he treats you."

Her smile was thin. "Yeah, I know," she said. "But I think I don't treat him well either."

12

When Sabin was twenty-one, she hadn't known who Zeller was. He'd just been a crewmember on the *Rannsaka*, one of the ships that had used her grid system to explore foldspace in search of her father's ship.

Zeller had simply been a face in the crowd when she boarded the *Rannsaka*, heading to its largest crew dining room for a briefing.

What she encountered was a celebration.

Over two hundred crewmembers applauded her as she walked into the room. The captain, a severe woman who until this point rarely seemed to smile, had led the cheers, then surprised Sabin by saying,

"And thanks to Tory Sabin, we now know what happened to five of our vessels. Five, considered lost, and now found."

Sabin's breath caught. She'd been running so-called test missions of the grid search for more than a year. The missions were no longer tests, really. Everyone knew they worked on some level. But so far none of the ships found had been the *Sikkerhet*. All had disappeared at different times, and in different sectors of space. None had had crewmembers that anyone knew, and indeed, the ships themselves had been empty for a long time. There weren't even bodies on board, although no one knew if the crews had left voluntarily or not. Most of the ships were open to space. Those ships could have been raided, abandoned, or simply suffered through the passage of time.

As of yet, no one had even tried those ships' *anacapa* drives or even tried to boot up the other equipment. The ships had piggybacked on the science vessels and had been taken to Sector Base T so that they could be studied.

Four of those ships, anyway.

Sabin hadn't known about a fifth.

She turned to the captain and said softly, "There's a fifth?"

"Yes," the captain said with a smile. "We found it at the very end of our search and it's already at Sector Base T. And this one's mostly intact."

Sabin knew better than to ask the captain why no one had contacted Sabin. Gradually her mission was changing from testing to something run by the military, and the military rarely gave out information.

The entire crowd had grown silent. Maybe they saw Sabin's reaction, a tentative response, not quite the joy everyone had expected.

She had gotten the news on the other four in her command headquarters on the *Pasteur*, and she had been with her team. They knew she had been searching for one ship in particular, so her mixed reactions hadn't bothered them.

She wished she could remain as calm as a scientist should in such circumstances, but her heart rate increased. Her face was slightly flushed and she knew she looked just a bit too eager.

"What ship is it?" she asked, suspecting she knew the answer. After all, why would they throw a celebration if it weren't the *Sikkerhet*?

"The *Moline*," the captain said, "and the good news is that she's mostly intact."

The ship's name rolled around in her head for a long moment. *Moline. Moline.* She



hadn't even heard of that ship. She had heard of two of the others before they were found, but the *Moline* wasn't one that had any obvious known history.

She could feel her intellect trying to wrap itself around the news, while her heart sank. She needed to leave the room, she needed to be alone with this, but she also needed to acknowledge everyone's good work.

"That's excellent," she said and hoped she sounded enthusiastic.

"And," the captain said with that unbelievably cheerful sound in her voice, "I wanted to let you know that the *Alta* has decided that your foldspace searches are now going to become part of the Fleet's regular systems. We'll design ships to do the searches, train people, everything. Your program is official now!"

The crew cheered and applauded. Sabin smiled at them—at least, she hoped she smiled. How come no one had told her this personally? Why were they doing this kind of "celebration"? Didn't they know this wasn't about the old ships or even the program? It was about her father.

At the thought of him, the frustration she'd been holding back welled up. She knew better than to react here. Instead she smiled, waved some more, and then nodded once, fleeing the room.

She made it halfway down the corridor before she burst into tears. She had known things would change at some point, but she figured she'd find her father first.

The search wasn't refined enough yet. She couldn't pinpoint where a ship disappeared and where it had gone to in foldspace. The grid search had used *anacapa* signatures to track ships, yes, but they weren't ships that anyone had been searching for. They had disappeared long ago; their crews would have been dead now, anyway.

Some of the *Rannsaka's* crew came through the corridor. She turned away, unable to go farther, and hid her face against the wall, hoping no one would stop for her.

One man did. He touched her back, asked if she was all right.

"Yes," she had lied. "Yes. Just tired."

She had no idea if she knew him or if he knew her. She never even learned who he was. But later, she'd come to suspect Zeller. Zeller, who realized how broken up she had been over not finding her father's ship, about effectively being removed from running the program she had started. Or maybe that man had been someone else, and she had given Zeller too much credit. Maybe the man—whoever he had been—had no memory of an incident that loomed so large in her own mind.

The next day, she asked to search for her father's ship. Her request was denied. Apparently Command Operations on the *Alta* wanted to examine the five recovered ships before searching for any more.

They told her to put in a request for a future search, and they would get back to her.

They commended her for her service. They designed an entire group of ships to search foldspace, based on her plans. They offered to promote her.

She let them.

And six months later, she was moved from foldspace search to engineering, where she was supposed to improve the *anacapa* design.

Five years after that, after applying and reapplying to search for her father's ship to no avail, she applied to the academy for officer training.

And, it turned out, only Zeller had figured out why.

"I haven't run a search since the very first one, decades ago," Sabin said to Cho. "Things have changed, procedures have changed, and honestly, I haven't kept up with most of it."



She shifted in her chair. The room had closed in on her.

Cho nodded. "I glanced at the information, and from what I can tell, the only time we recovered a ship in foldspace right after the ship missed its window, we had gone in within twenty-four hours."

She closed her eyes. She could almost picture Coop, grinning at her over a private dinner in their suite on Starbase Kappa, teasing her about the changes in protocol on something or other. He had once told her that she jumped in too early, in his opinion, that a captain needed caution to protect his crew.

She had told him that a captain also had to know when to take a risk.

Cho said something, but she held up her hand to silence him. She needed a moment to think. He was going to explain risks to her that she understood, risks she invented for god's sake.

Ships had to dive in and out of foldspace just to do the grid search, and each trip into foldspace, each search, put the rescue ships at risk. The best grid search took the coordinated effort of five or more ships, exchanging information, going in, coming out, never staying in foldspace longer than a minute or two to gather information.

Because a minute or two in foldspace could be an hour or more outside of it.

Sixty minutes or sixty-five or sixty-three. The correlation was never entirely precise, which was what made foldspace so very dangerous.

In fact, there were three main things that made foldspace dangerous. The first was that no one entirely understood it, so the sensible captains were leery about using it. The second was that the sensors did not work between foldspace and real space. So returning from or going to foldspace meant that a ship might land on top of something else, like an asteroid or, in the case of real space, another ship.

And of course the final great risk was the one she dealt with right now: the longer a ship stayed in foldspace, the more unreliable the time of return became. No one could predict the exact moment the ship would come back, only that it would come within a time frame. That was why Coop said twenty hours, but he didn't specify down to the minute or second.

The biggest problem Sabin had now was this: the front line didn't have five ships to spare. She knew that, and Cho hadn't mentioned any others. The crew of her ship was going to have to do something it wasn't trained for, and she would be risking her crew to save another. Jumping in too fast.

She had a hunch Coop would have waited until the investigative team arrived.

She wouldn't.

She opened her eyes. Cho was watching her patiently, as if he expected her to say no. He had given her time, and she appreciated that, especially since his time was so valuable. Just like hers was. Like Coop's was.

"I think we need at least two ships to do this," she said. "And if there are crewmembers on any ship in the front line who used to work foldspace investigation and rescue, I'd like them to join my team for this rescue attempt."

Cho's jaw moved just a little, as if he started to say something and then held it back. "The *Alta* didn't approve two ships for this mission," he said.

She started to argue, but it was his turn to hold up his hand.

"But," Cho said with great force. "I agree with you. If we're going to mount a rescue, we're going to do the best we can to get it right."

She grinned at him, and felt—astonishingly—a prickle of tears behind her eyes. Dammit, she cared more than she wanted to.

She probably should have admitted that as well, but she didn't. Besides, she suspected Cho understood.

She suspected his willingness to countermand the orders from the *Alta* had more to do with Coop and the *Ivoire* than it did any kind of common sense.



She appreciated it, but she didn't tell Cho that. She suspected he already knew.

## 14

It took half an hour to prepare for the rescue. The *Geneva's* partner ship on this mission was the *Pueblo*, commanded by Captain Jakoba Foucheux. Foucheux had spent two months in foldspace investigation and rescue before asking for a transfer. The reason for the transfer remained classified, a procedure that usually meant some issue with a superior officer, and usually one that never got properly resolved in any kind of arbitration.

Sabin didn't have time to dig deeper. She was relieved to have Foucheux, whom she liked, as her partner, but disappointed that Cho had only found ten other crewmembers who'd worked in foldspace investigation and rescue. Of those ten, only five were available to transfer to Sabin's ship. The others were too far away on the search near Ukhanda to get back in time to start this mission.

Their job would be deceptively simple. Once Sabin finished the math confirming what she believed Coop had done given the information he had managed to get to them, the telemetry that the *Ivoire* had automatically sent to the Fleet, and given the time he'd been gone, she could—within a limited range—figure out the coordinates in foldspace.

The foldspace investigation and rescue section had a formula for all of this, and since they were the ones that had actually discovered recently missing ships in the past, she had two of the borrowed crewmembers use that formula as well.

All three people—the crewmembers and her, using her old system—had come up with the same location, which cheered Sabin. If they had been searching for a ship that disappeared long ago, they would have a lot more trouble coming up with the same location. They'd probably suggest three different locations, and maybe more, depending on how they all tweaked their formulas.

Once they had a location, the ships would work in tandem. First the *Geneva* would head to that part of foldspace and immediately scan the area. The *Geneva* would stay no more than a minute, and reappear, sending all of its scanned information to the *Pueblo*.

The *Pueblo* would do the same thing, scanning a slightly different swath of foldspace, and the two ships would continue to work in tandem until they found something, or until the actual investigation and rescue ships arrived.

The problem was that there were no guidelines on which direction to proceed once the searching ships moved beyond the scans of the original location. That was why five ships was better, and more than five desirable. The ships would partner, and go in *all* directions, doing so quickly, then moving to cover as much of that region of foldspace in the shortest amount of time.

Sabin had to pick a direction after the third set of tandem jumps, and she didn't like that. She hoped the *Ivoire* would be easy to find, that it would show up—even as a speck—on the nearest grid search. But she knew that hope and reality often failed to coincide.

## 15

The first jump into foldspace felt like any other. First, the thrum of the *anacapa* drive, which she barely heard or felt on a normal day, faded. Then the screens



blanked. Sabin knew that if she were watching the navigation controls, they would flicker for just a moment.

The entire ship would bump, only once and very slightly. If she were in a vehicle on the ground, she would think that vehicle had hit a small rock, sending a tiny reverberation through the entire system.

Then the screens would reappear, the navigation controls click back full force, and the reverberation disappear, replaced by the thrum of the *anacapa*.

Sabin had jumped into foldspace so many times she usually didn't notice the details. In fact, she could only remember noticing a few times in her past: on her first trip doing a grid search, on her first jump as chief engineer, and then the first time she piloted a vessel, as a lieutenant on the path to full command.

So, Sabin watched herself react here as if she were standing outside herself. Paying attention to those tiny details, common details, meant three things. She was worried about this grid search. She was worried about her ship.

And she was worried about Coop.

The images on the screen were a star map she didn't recognize. Even though that happened with every jump into foldspace, it was still something she noticed. She liked knowing exactly where she was, and in foldspace, she never did.

"Rapid grid search," she ordered, even though Wilmot, Phan, and Ebedat were already bent over their consoles. Sabin wanted to be in and out of foldspace as fast as she could.

"We have it, sir," Wilmot said.

"Good," Sabin said. "Let's go back."

Alvarez activated the *anacapa*.

As the screens blanked for the second time in less than a minute, Sabin said, "Graham, the millisecond we return, you need to send that information to the *Pueblo*. Even before we analyze."

"Yes, sir," Graham said.

By the time he finished speaking, the *Geneva* had returned to real space.

"Done, sir," Graham said, and as he spoke, the *Pueblo* vanished.

Sabin let out a small breath.

"Any ships?" she asked Wilmot.

"Not obviously in this first grid," he said. "How deep a search do you want?"

"It's all we got at the moment, so keep some part of the system probing as deep as possible," she said. "The better the search, the better our luck will be."

And as she said that, the *Pueblo* returned in the same place it had been a few minutes before.

"Okay," she said, "let's go again."

And they did.

## 16

Twenty-five searches later, Wilmot said, "Sir, the *Pueblo* may have found something."

Sabin's heart rose, but she made herself take a deep breath and tamp down the emotion. "May" was not definitive enough, and Foucheux was the kind of woman who would be accurate in her descriptions.

"Tell the *Pueblo* that we'll delay our search to see what's on the grid. Let's compare notes."

Sabin knew that speed was of the essence. The true investigative team wouldn't be here for a while, so the *Geneva* and the *Pueblo* needed to act. But they had to act together, and as accurately as they could.



Sabin had the five former members of foldspace investigation and rescue evaluate the information. She did the same.

And she discovered that Foucheux was right: there was something at the edge of the *Pueblo*'s last grid search that looked like one of the Fleet's ships. Oddly, it didn't have an active signature, but that could mean many things.

It could mean that the *Ivoire* was dead, with no power at all. It could also mean that what they were looking at was a ship, but not one of the Fleet's.

"Is the computer finding anything else on its deep searches?" Sabin asked Wilmot. "Are we getting other strange readings?"

"No, sir," he said. "This is the only thing that could be a ship, according to the data we've analyzed so far."

No analysis could be complete in such a short period of time. There could be other things in the grid that they'd missed because of their focus on the *Ivoire*.

But all of that—if there was anything at all—would have to wait for the foldspace investigation and rescue team.

She needed to make a decision now.

"Tell the *Pueblo* we're going to focus our search on that part of the grid, and we're going to take a maximum of three minutes per search inside foldspace instead of one minute."

"Sir?" Wilmot asked. "The time—"

"I am aware of the time," Sabin said. "We don't have enough ships to double up, so we have continue doing this as best we can."

Her heart was pounding. Three minutes in foldspace would seem like forever to the ship outside foldspace. But it would also give her time—and Foucheux time—to figure out what, if anything, that reading on the sensors was.

"Take us into the last place the *Pueblo* was," Sabin said to Alvarez. "Then prepare to move quickly toward that blip. If we read it as anything but one of our ships, we move back into position, and return to real space. Got that?"

She wanted everyone clear on the mission before they went in.

"Let the *Pueblo* know we're heading in," she said, and gave the order.

## 17

When they were inside foldspace, the blip on the *Pueblo*'s search grid did not seem like a blip at all. It looked solid.

Sabin's bridge crew worked quietly and quickly, shouting out information only when necessary.

The blip wasn't that far away from their position, and as they approached, it became clear they *were* looking at a ship.

One of the Fleet's ships.

But not the *Ivoire*. The *Ivoire*'s design was sleeker, with some of the design tweaks that Sabin herself had helped engineer.

Her heart continued to pound as they approached the ship.

It had no power; that was evident. And its *anacapa* wasn't working at all. No matter what system the *Geneva* used to see if the ship had an energy signature, they could find nothing.

It took less than a minute to get close enough to enable full visual on the ship.

Its center was gone; only the outer edges remained, giving it a ship-like shape, but no real heart.

No wonder she saw no evidence of the *anacapa*. There was no *anacapa* at all. The bridge was gone, engineering was gone, the heart of the ship was gone.



And it looked, from a cursory glance, as if the entire ship had somehow been ripped open. At some point, probably when the ship arrived in foldspace, it had hit something, done the thing everyone feared, and landed on top of, in the middle of, something else—an asteroid, space debris, or another ship.

No one survived.

Even if they had survived in the outer edges of the ship, they would not be alive now. Without that center core of the ship, the crew would have had only a few weeks to live. And judging by the design—what she could see of the design—those few weeks had expired years ago.

“Captain.” Wilmot’s voice was tight. “Look.”

He zoomed on a section of the damaged ship, showing that section only to her. The name of the ship registered on her screen:

The *Sikkerhet*.

Sabin had finally found her father.

18

Somehow, Sabin remained calm. That detached feeling she’d had earlier when the *anacapa* first activated had returned. She knew that she had to captain the *Geneva*, and she had to continue on her mission.

Only the mission had changed.

They did have a ship to recover as well as one to find.

But their time had run out. They also had to return to real space.

Sabin got the *Geneva* back. Then she contacted Foucheux. Sabin almost asked for a private conference, but knew that was for her. It wasn’t necessary and it would take too much time.

Foucheux appeared on one screen to the left of Sabin. Foucheux was tall and thin, and seemed more so on a two-dimensional screen. Her mocha-colored skin looked a bit gray, but that might be the lighting or the imagery.

Or she might be tired from the interruption of the respite period, just like everyone else had been.

Foucheux stood with her hands clasped behind her back. That posture, and the way that she had pulled back her black hair, made her seem more severe than usual.

“It’s not the *Ivoire*,” Sabin said, even though she suspected Foucheux had already seen the data. “It’s the *Sikkerhet*, and it was destroyed long ago. I have no idea how it got to this part of foldspace or what that even means. The *Sikkerhet* has been missing for decades, and it was nowhere near this section of real space when it disappeared.”

Her voice remained calm, normal, in control. She felt like three people—the captain of the *Geneva*, a little girl who had just realized her father was really and truly dead, and the woman who watched them both.

“Regulations require us to continue the search for the *Ivoire* and let recovery teams handle the *Sikkerhet*,” Sabin said. Wilmot was watching her. She had a feeling that Wilmot expected her to countermand regulations. “And in this instance, regulations absolutely apply. The *Sikkerhet* is beyond help, and any crew that survived either took lifepods elsewhere long ago, or expired when the ship got destroyed.”

Her voice still remained calm. She felt calm. Or at least the captain part of her did, as did the observer part. The little girl had a metaphorical fist against her mouth to prevent an outburst, and wanted nothing more than to flee to her cabin right now.

There was no right now, not for grieving. Technically, Sabin should have done that a long, long time ago.

“So,” Sabin said, “let’s maintain our initial plan for the grid search and our initial



timeline. I'll send the location of the *Sikkerhet* to the foldspace investigation and rescue team."

Foucheux nodded. Her posture didn't change, but her expression had softened. "I was going to suggest the same thing. But, let me be the first to say to you that I'm sorry."

Sabin had nearly interrupted. She didn't want her crew to know the meaning of the *Sikkerhet*. Nor did she want any more sympathy.

"Thank you," she said, and this time she had just a bit of wobble in her voice. "Now, let's get back to the search."

"We're on it," Foucheux said and signed off.

After a moment, the *Pueblo* disappeared into foldspace.

Sabin took a deep breath and sat down.

"Captain, did I miss something?" Ebedat asked. "Did something—"

"Nothing's amiss," Sabin said, trying to forestall the questions. "We continue the search. Please make sure that Captain Cho, the *Alta*, and foldspace rescue all know about the *Sikkerhet*."

"Yes, sir," Ebedat said. "Already done, sir."

"Good," Sabin said, and forced herself to focus, as she waited for the *Pueblo* to return.

## 19

"If I could discourage you from this path, I would," Major Zeller said, on the day he became her advisor.

They were sitting in his office on the *Brazza*, a blue-and-white planet visible through the gigantic window on the left side of the room. The *Brazza* was in orbit, while the Fleet tried to decide if the planet would become the next sector base location. A series of post doctoral students were taking part in the studies, so someone in command believed it easier to have the *Brazza* in orbit than in its usual place near the bulk of the Fleet.

"You should go back to engineering, designing, and numbers," Zeller said. "You have a gift for them, and we need someone like you there."

Sabin hadn't expected his negativity, particularly since he was to be her advisor for the next few years.

"I tested well," she said. "In fact, I tested higher than anyone else this year."

"You did," he said. "Tests aren't everything."

"I know that," she said. "But I come from a long line of commanders. My father was a captain. My grandfather made general. My great-grandmother—"

"I'm aware of your family's history," Zeller said. "That's why we're talking. It's your family's history that makes me think you're not captain material."

She felt the shock all the way through her. No one had spoken to her like this before. Until this moment, everyone she had encountered, all of the administrators, instructors, and so many others believed she belonged in command.

"Excuse me?" she said, because she didn't know how else to respond.

"Ever since your father disappeared, you've been on a single-minded mission to find him," Zeller said. "Along the way, you have helped the Fleet. Your design for searches in foldspace is genius. The tweaks you've made to the *anacapa* systems and use are valuable. The designs you've added to the ships are both luxurious and comfortable. But none of that will make you a good leader. In fact, I think you'll be a terrible one."

Her face warmed. If she got angry now, though—or, at least, let him see how angry she already was—she would prove him right.

"My father has been gone a long time," she said.

"Yes, he has," Zeller said. "But I know how this goes. I've lost people too. I was on



the first team sent—using your methods—to try to find the *Sikkerhet*. I volunteered because I had family on that ship.”

His expression changed just a little, saddened, then hardened again. This was not a man with whom she could speak of shared sympathy.

“The hardest part of being a leader, Victoria,” Zeller said, using her real first name, which no one ever did. It made her feel even smaller, “is not decisions, but the attrition. You will lose people. They will fall away like parts off a damaged ship. They will get angry and move planetside, they will transfer, or they will die in battle.”

She knew that. She had already lived through it. Even children lost friends when ships went down. The losses had been part of her life, like they were part of everyone’s life here in the Fleet.

“But some of them, Victoria, will disappear. Literally disappear. You won’t know what happened to them ever. They will be like ghosts who haunt you through your entire career.”

“I know that,” she said.

He gave her a contemptuous smile. “No, you don’t. You think you do because we all lose people, we lose things, we lose ships. But you don’t, because you’ve never been responsible for the loss. You’ve never ordered a ship to go into a dangerous maneuver or into foldspace or into a battle where no one emerges alive. The responsibility is what’s different, Victoria. And the responsibility makes you second-guess everything.”

She willed herself not to move. She suspected this conversation was more about him than it was about her. He was probably moved off the career track into academic administration because he couldn’t handle the results of his own orders.

“When you start second-guessing,” he said, “everything you do, everything you are, is about that ghost. Every captain has one. Generals have dozens. But they acquire them during their commands. They lose people. And not every leader mentally survives those losses.”

She was convinced now: this was about him, not her. But she listened.

She had no other choice.

“You already have a ghost,” he said. “One that you can’t let go of. Your entire life has been about finding your father, and he can’t be found. He is *gone*, Victoria, and nothing you do, no search patterns you develop, no tweaks you make to the *anacapa* drive, no command you give when your ship needs to go to foldspace, will ever change that.”

She wasn’t sure if she should respond. But he had paused for several seconds now, so she said, “I know that, sir.”

“Intellectually, yes, you know that. Emotionally, you do not. And someday, you will risk your entire crew because of your father. You will make a decision that has nothing to do with now, and everything to do with that loss. It might not seem obvious. It might seem totally unrelated. But it won’t be. And more people will die.”

She wanted to say sarcastically, *Thank you for your belief in me, sir*, but she didn’t.

Instead, she silently vowed she would prove him wrong.

“I’m not leaving the officer training program,” she said. “If I wash out, fine. But I want to do this. I think I’ll be good at it. I think I’ll be better at it than anything else I’ve ever done.”

He shook his head slightly, as if he couldn’t believe her arrogance. Well, she couldn’t believe his. Who was he to tell her who she was and who she would be?

“I’m going to be watching you,” he said. “The moment I see that ghost making decisions for you, I’m pulling you out. Is that clear?”

She wondered how he would know. Would he fudge results? Would he see a “ghost” where there was none?

But she knew better than to ask. She remained as still as she possibly could, so he wouldn’t see her steeling herself for battle with him.



"Yes, sir," she said calmly. "That's clear."

Technically, she should have thanked him. Technically, she should have told him that he was doing the entire Fleet a favor by keeping an eye on her.

But that was admitting weakness.

She wasn't going to admit weakness. Especially not now.

She wanted to command—and she would.

And she would be so much better than Zeller ever was, than Zeller ever could be.

But she didn't tell him that either.

Instead, she would show him. Every single day, for the rest of her life.

## 20

The *Geneva* and the *Pueblo* continued the grid search, but Sabin knew after the fiftieth iteration they would find nothing. No trace of the *Ivoire*.

She tried not to feel dispirited, and when the emotion threatened to overwhelm her, she privately blamed it all on the confirmation of her father's death.

She didn't let any emotion show. She did her job, coldly and efficiently, knowing she could tend to her emotions later.

Even after the foldspace investigation and rescue team arrived, even after they failed to find the *Ivoire* with a thorough by-the-books search, she held her emotions back.

They did her no good. They certainly didn't help her, or anyone, find Coop.

The *Geneva* took part in a lot of the background investigation, providing support, ferrying teams to various parts of the Ukhandan sector.

And all the while, the foldspace investigation and rescue team searched, doing the math over and over again, trying to find a hole in the logic, replaying the telemetry sent by the *Ivoire*, the coordinates, the estimates—and finding nothing.

Just like the ships that searched for the *Sikkerhet* found nothing all those years ago.

When it became clear that the *Geneva's* role would be minimized, Sabin took some time off—actual time off.

She got some sleep. And she spoke to a mandatory grief counselor. She was proud of herself; she didn't lie. She said the discovery of her father's ship brought everything back up, and created as many questions as it answered.

The remaining information systems on the *Sikkerhet* were corrupted, the life pods were in place in the intact portions of the ship, but all of that meant nothing considering how much time had passed.

The foldspace investigation and rescue team brought the *Sikkerhet* back to real space, and would take it to Sector Base V for study. There they would figure out what the information systems said, what happened in the last few hours of the ship, and how it got to that part of foldspace.

For all anyone knew, that part of foldspace was the part ships went to when they activated the *anacapa* decades ago. Or maybe it was easily accessed from the part of real space where the *Sikkerhet* had been when it disappeared.

No one knew, but they did know they had to answer some questions. Sabin knew that she needed the questions answered as well.

Because, she figured, if they found out what happened to the *Sikkerhet*, they might end up with more information in their search for the *Ivoire*.

That search would continue for months, maybe years. Already a mathematics and theoretical physics team had come in to watch the imagery of the *Ivoire* in the moments before it vanished. They were timing the last message, and figuring out why it



had reached the ships before the *Ivoire* disappeared, since those two events should have happened simultaneously.

The hope was that they would figure out the differential, use it in the equations that sent ships into a particular part of foldspace, and find the *Ivoire*.

The *Alta* had sent another diplomatic ship to work with the Xenth in locating the ships that had attacked the *Ivoire*. If a team from the Fleet got to investigate those ships' weapons systems, they might figure out how the weapons interacted with the *Ivoire's* *anacapa*, if those weapons did indeed interact with the *anacapa*, and maybe come up with some answers that way.

The *Geneva* was to help transport the *Sikkerhet* to Sector Base V. Sabin knew that she had received a charity mission, one that would let her find some answers slowly, and for once in her life, she didn't care.

Because she had finally come to some conclusions.

As the *Geneva* traveled back to Sector Base V, she asked for a private conference with General Zeller.

She spoke to him from her private communications room in her captain's suite, the same room where she had spoken to Coop night after night after night.

She didn't miss the sexual side of her relationship with Coop—that had happened only a few times per year—but she missed the friendship, the ability to consult with someone who had a similar job but a different point of view.

She felt all alone now, in a way she had never felt alone before.

But she didn't tell Zeller that.

Instead, when his disapproving face appeared on her screen, she actually smiled at him.

"I'm finally going to do what you want, General," she said, after the initial niceties ended.

His gaze kept moving away from her image, as if something else in the room interested him more than any conversation with her could. "And that would be?"

"I'm resigning my commission. I'm stepping down as captain of the *Geneva*."

His entire posture changed. His gaze snapped forward, meeting hers.

"That is not what I want," he said. "You have become one of the best captains in the Fleet. You proved me wrong long ago, Captain Sabin, and even on this most difficult mission, you kept your focus on the task at hand, setting your personal problems aside and rising to a standard that few captains achieved."

She had waited years for praise like that from him. Her cheeks warmed as her face flushed. But the praise was no longer relevant.

"Thank you, General," she said, "but I realized on this last trip that you were right: my father's disappearance has haunted me. It still does. We don't entirely understand what happened—"

"We're pretty sure that the ship collided with something in foldspace as it arrived," Zeller said. "Every captain's nightmare."

"Yes," Sabin said. "It is, and they're probably right. But I want to know."

"You can get reports. Your talents would be wasted working on the remains of the *Sikkerhet*. Let the technicians do it—"

"General," she said gently. "I've acquired a new ghost on this trip."

To his credit, he stopped speaking and frowned. "Someone on the *Ivoire*?" he asked, keeping the question both professional and delicate.

"Captain Cooper and I were good friends," she said, unwilling to explain more. "I believe if I return to foldspace and *anacapa* research, I might be able to find him."

"We've lost one excellent captain on this trip," Zeller said. "We can't lose you as well."

A month ago, these comments would have angered her. She would have wanted to



know why he hadn't said such things to her before, why he had kept his evaluations to himself.

Or she would have demanded to know why he believed her good now, instead of earlier. She could almost hear her own voice, strained, angry: *Am I a better captain now that you're short a captain, General? Or are you supposed to say this to keep me in line?*

But she didn't have the energy or the desire for that kind of confrontation.

"General," she said gently, "my full attention will never again be on the *Geneva* and that, by definition, will make me a bad captain. I'm going to resign my commission, and you can't talk me out of it. If you value my work, please help me secure a good spot on the teams investigating the *Sikkerhet* and the disappearance of the *Ivoire*."

His expression was flat. Only his eyes moved, as if he could see through the camera into her soul.

"I have never understood you," he said. "I always thought I did, but I don't."

"I disagree, General. You believed me obsessed with my father's disappearance, and I was. When I realized I could learn no more, I put myself in a position to emulate him. And now that we have information again, I want to return to research."

Zeller shook his head. "Your father wouldn't understand this."

"Probably not," she said. "I think it would make him angry."

She didn't add the rest. She had finally realized that she was her mother's daughter as well as her father's. Unlike her mother, Sabin thrived in a military environment. But unlike her father, she had to choose her own path, and if that path deviated from the norm, she had to follow the new path instead of trudging along the old.

Amazing that a double loss—learning her father was truly dead and suspecting that Coop was as well—would help her discover who she really was.

Perhaps that was what living was all about, using the good and the bad to determine the essence of one's self.

"I'll be more useful in research," she said. "Of course, I will remain on the *Geneva* until the Fleet can provide a suitable replacement."

"I don't think anyone has resigned a captain's commission after such a success, Sabin," Zeller said. "Not in all the years of the Fleet."

She didn't believe that was true. There were centuries of Fleet history, and so much had disappeared into legend.

"I don't consider what happened in foldspace a success, sir," she said. "We lost the *Ivoire*."

"And found a ship that we had thought gone forever, Captain," Zeller said. "We wouldn't have found it without you. The foldspace rescue team says they might have dismissed that blip on their equipment. They think you and Captain Foucheux saw things they did not, and they must change their algorithms accordingly."

This was one of the reasons that Sabin had to return to research and foldspace investigation. The method of doing things had become more important than the purpose for doing those things.

The teams no longer thought of the lives hanging in the balance. They thought about the probabilities for success.

And with that realization, she finally understood what Zeller was telling her.

There was only one person who could have found the *Sikkerhet* on this mission, one person whose thinking was both rigid enough to conduct a grid search and creative enough to explore all the possibilities.

That was why he considered her mission a success.

"I am going to see if we can invent a new position for you, Captain," Zeller said. "We need something better in investigations, and we need someone of command rank who can run that new system. Tell me you'll keep your captain's commission and accept the reassignment."



"Only if I may focus on research, sir," she said.

"Research, investigation, and the technology itself. I'll see if we can change the *Geneva's* designation so she can be the ship in charge of that part of our team."

"Sir, the *Geneva's* not equipped for the kind of work we would need to do," she said. "We would need a newer ship, one outfitted especially for us."

His eyes narrowed, that disapproving look she knew so well. He had once accused her of taking what little she was offered, and ungratefully asking for ten times as much.

She had just done so now.

But she didn't take back her request.

"My instinct is to say no, Captain," he said. "But I have learned that my instinct always discounts you. So I will see what I can do."

"Thank you, sir," she said as he signed off.

She sat in her small back-up control room for several minutes afterward, staring at the blank screen.

For the first time in their careers, neither Zeller nor Sabin had won the argument with each other. They had compromised in a way neither of them would have thought possible two decades before.

She was starting something new, remaking something old into a brand new part of the Fleet.

And, sadly, the first thing she wanted to do was tell Coop. He might not understand her choice, but he would give her an intelligent and lively discussion. He would let her know what she hadn't thought of, and what she needed to do to make the experiment work.

She closed her eyes for just a moment.

She would remain a captain, and the loneliness would still be a large part of her life.

Maybe even larger now, without Coop.

As a young girl, she had needed her father back. She couldn't imagine life without him.

As an adult woman, she wanted Coop back. But she could easily imagine life without him. It just wasn't something she would have chosen. None of this was.

And here was the difference between her childhood and now: If her research found Coop alive, she still would retain a job in research and foldspace investigation. If they had found her father before she quit school, she would have become someone else.

Funny how the events of one's life changed that life.

Coop understood that. He seemed to fathom how wisdom was hard-earned, not something someone else could impart and believe that another person would get.

Maybe that was why the Fleet's insistence on stepping into life in other cultures bothered him so much. Because he hadn't even been certain he understood his own life.

She wished she could tell him that she'd finally realized what he had been telling her all those months ago.

And, in acknowledging the feeling she had, she realized also that she believed, deep down, she would never get the chance to tell him. Even if her research led to his ship's discovery forty years from now, she suspected Coop would not be on it, just like her father hadn't been on his ship.

Hard-won understanding.

It wasn't quite the death of hope—part of her still hoped that Coop was alive somewhere.

It was more like the application of hope.

She wanted to make sure that no one else—child, adult, crewmember, captain—would ever lose a loved one to foldspace again.

It was probably a vain hope.

But it would keep her going, for at least another forty years. ○



## Quantum Boojum vs. the Clone Family

**H**aving recently finished his massive *Void* trilogy with *The Evolutionary Void* in 2010, Peter F. Hamilton takes a real lazy writer's break, producing *Great North Road* (DelRey, hardcover, \$30.00, 976 pages, ISBN 978-0-345-52666-3) a mere nigh-unto-1000-pages-long standalone novel! Good Lord, when does he find time to eat and sleep?!? Oh, well, there's no room for complaints, given Hamilton's consistently high quality of writing and storytelling. And as for a cargo of ideas, this book is well freighted too.

Hamilton offers a timeline right at the start of the text, covering the years 2003 through 2121, and the era proves a jam-packed one. Instantaneous stargates are invented; a burgeoning family of clones descended from one Kane North become the Machiavellian Bill Gates-style figures of the period; human colonies proliferate across the galaxy; and some deadly aliens named the Zanth come calling. (And is that species name meant as an in-joke on Piers Anthony and his famous fantasy series?) Having established this outline very succinctly, Hamilton plunges us into the fully articulated and fleshed-out reality of 2143, with a police procedural opener.

Our first POV character is one Sid Hurst, a detective in Newcastle-Upon-Tyne, who finds a murdered member of the North clan. The murder investigation soon opens out into an interstellar mystery. This new death appears to be connected to a mass murder among the secretive Norths twenty years in the past. Into the scene now steps a representative of the Human Defence Alliance, Vance Elston. He suspects that the real murderer is a new kind of non-

Zanth alien, and he also believes that the woman falsely convicted of the old murder, Angela Tramel, holds the solution to both old and new puzzles. She's pardoned and released from prison, and made to accompany an HDA mission to the world of St. Libra, there to hunt the deadly creature from the stars.

Hamilton proves himself a master at the sheer architectural structuring of his massive tale, deftly juggling the two plot lines on two planets, and waltzing scores of characters on and off stage. With Sid on Earth, he constructs an Asimovian SF-detective tale, playing square with the reader and making the game challenging for himself. How, after all, can crimes go unconcealed in a world where every human is somatically wired with "smartcells" to record information, and the environment is saturated with intelligent dust? On the world of St. Libra, Hamilton gives us a kind of *Aliens-meets-The Thing* scenario, a pure dose of *Astounding*-style John W. Campbell suspense for a new century. The two plot threads converge, of course—rather, they have been fluidly interpenetrative for the whole narrative—and the climax happens in a bloody explosion of first contact misunderstandings and reconciliations. A lovely little coda extends the reach of the tale for another millennium.

Hamilton never pads his tale with unnecessary stuffing. Each scene is compact and well wrought and unrepentant. But are they all *essential*? Despite my enjoyment of the tale, I could not help but speculate on how it could have been presented at half or even one-quarter of its length. I think market forces—as well as perhaps Hamilton's natural instincts—dictate such epic tomes these days, and wonder if we will ever return to the glory days of the 1950s, where compression



and density and the “short sharp shock” trumped sprawl.

### ***Argosy* and *Blue Book* Live On!**

What is the difference between a pastiche and a homage? I tend to think of the pastiche as more or less a synonym for the term most often used to define it: an imitation. In other words, a creator identifies the most salient and characteristic aspects of a prior work of art and recreates them point by point, with trifling differences. As for an homage, consider that it is most often defined as a tribute. In other words, a creator, having been moved emotionally or intellectually or esthetically by some work of art, in turn fashions his or her feelings into an object that might be suitably offered to the original artist and his fans as a resonant personal thank-you. The essence is celebrated, not just the mere forms.

Let me put it this way, in an analogy I think almost everyone can readily comprehend.

Lin Carter wrote pastiches. Philip José Farmer wrote homages.

A good pastiche can be enjoyable, but definitely exhibits less originality than a homage.

Mark Hodder is inarguably on the PJF-homage end of the spectrum. (I'd say Matthew Hughes is there too, with his Vance-inspired work.)

We've seen some admirable steampunk novels from Hodder, and that is a medium which, by its very nature, is heavily into pastiche and homage. But with Hodder's newest, *A Red Sun Also Rises* (Pyr, trade paper, \$17.95, 277 pages, ISBN 978-1-61614-694-8), he's branched out into a different realm. He's kept some steampunk trappings while moving into the territory of Burroughsian planetary romance. Yet the resulting novel is utterly authentic and effective, delivering a story that, while it harks back to a vanished era, also incorporates the sensibilities and perspectives of twenty-first-century SF. You get nostalgia and forward-looking attitudes and speculations combined!

Our book opens with “Mark Hodder” telling us in a preface that this novel is the true account found in the recently retrieved journals of a vanished Victorian preacher, Aiden Fleischer. Of course, we will instantly flash on *A Princess of Mars*, and its similar famous frame-tale opening. And this affiliation is very apt. For, after a few nicely leisurely chapters, in which we get to really know and bond with Fleischer and his pal, the young crippled female savant, Miss Clarissa Stark, the pair will be transported by mystical/alien means to the bizarre world of Ptallaya. (The whole South Seas scenario that gets them there is evocatively Lovecraftian, a blend of science and horror.)

The reactions of Fleischer and Stark (and should we be hearing echoes of Leigh Brackett's Eric John Stark here?) to the dangerous, exotic, and surreal new planet are truly natural. No John Carter heroics here, just confusion and a quest for survival. This is not to say that brave and mighty deeds are not eventually undertaken by both Stark and Fleischer, once they get their bearings.

And then, after Stark undergoes a strange alien dunking, the plot takes off into even weirder dimensions. Somehow her consciousness has now infected the entire native populace in a kind of “hundredth monkey effect,” turning all the outré creatures into faux Victorians. At this point, those readers who recall the *Hoka* stories of Anderson and Dickson might imagine they know what's coming. But they will still be in for a few surprises, for the strange ecology and astrophysics of the new realm feature many revelations yet to come.

Nodding in the direction of both Twain's *A Connecticut Yankee in King Arthur's Court* and James Blish's *A Case of Conscience*, this inventive hybrid tale offers pure Age of Storytellers fun with modern psychological veracity and speculativeness.

### **Portrait of Sophie**

Tim Powers continues to astound.



When he is not effortlessly delivering large-scale novels that brilliantly stretch the boundaries of what can be accomplished in the modes of contemporary slipstream fantasies or outrageous steampunk escapades, then he is tossing off accomplished novellas such as *Salvage and Demolition* (Subterranean Press, hardcover, \$30.00, 160 pages, ISBN 978-159606-515-4), which manages to conflate Robert Nathan's time-slip romance *Portrait of Jennie* with Robert Heinlein's "—All You Zombies—." Powers's hybrid creation matches those two geniuses at their own games. And many striking illos by J.K. Potter are delicious frosting on the cake.

First, consider our lackluster, unpromising hero, Richard Blanzac, a rare-book dealer. Even his name sounds "bland." We don't expect much from him right from the outset, given that he likes a stiff drink well before noon, and that his latest commercial score is a bunch of crummy cardboard boxes containing the papers of a tenth-rate woman poet associated with the Beats, one Sophie Greenwald. (And her name, as we shall see, fittingly conjures up both the goddess of wisdom, Sophia, and a mythical golden pastoralism.)

One box has curious contents: an Ace Double novel, some loose manuscript pages, and the ancient contents of an ashtray. Blanzac idly begins reading the manuscript, and experiences some vivid hallucinations. He chalks it up to booze. But almost immediately thereafter, oddly enough, he gets a call from an elderly woman who claims a legal stake in the Greenwald papers. And then there's a creepy fellow who wants to buy them—or steal them at gunpoint, if necessary.

Not much more of the plot can be revealed without spoiling the reader's delight. Suffice it to say that Blanzac becomes unmoored from the present in a mind-boggling cat's-cradle fashion. Billy Pilgrim's got nothing on him. In the space of less—and more—than a day, he falls in love, loses his love, and saves the world from a bizarre apocalypse. Pow-

ers's theological MacGuffin here is unique and ingenious.

Powers's sophisticated narrative challenges the reader without frustrating him, delivering just enough information to allow us to have fun deducing the rest and guessing at the twists to come. (You won't win against the devilishly clever Powers, though.) His evocation of the allure of writing and books, his depiction of the travails of authorship, and his all-round wry sympathy with the often melancholy human condition are all exemplary. And I must say that there has probably never been another fiction in which an Ace Double novel played such an important part.

Like many of Powers's tales, *Salvage and Demolition* teaches that personal sadness and tragedy do not preclude satisfaction and happiness and victory on some more lofty plane.

### Sophomore Success

A few columns ago, I reviewed Katy Stauber's debut novel *Revolution World*, and said: "Fast, funny, frenetic, it has echoes of Cory Doctorow and Bruce Sterling (at his most light-hearted). If you pictured *The Windup Girl* re-imagined by a team of Alexander Jablovkov and Donald Westlake, you wouldn't be so far off." Wow, I set the bar pretty high for her next outing, didn't I? Well, I am thrilled to report that *Spin the Sky* (Night Shade Books, trade paper, \$14.99, 308 pages, ISBN 978-1-59780-340-3) equals or surpasses its predecessor, along a lateral vector: not just more of the same good stuff, but different. It's more mythic in tone, while still hewing to a believable, surprising, enticing future history.

Stauber's concept, reduced to "elevator pitch" dimensions, is brilliant yet simple: retell Homer's *Odyssey* in a steinal way. In this, you might hear echoes of the famous New Wave strategy for creating "myths of the near future" (to borrow Ballard's coinage), a mode employed by Delany, Zelazny, Petaja, and others. Your hunch would be quite accurate. I suspect Stauber has those icons firmly in mind,



and good for her! Too often these days, I think, the New Wave is undervalued and written off. If some of its old goals and tactics and, for want of a better word, “soul” can be repurposed for twenty-first-century SF narratives, then we are all winners.

In Stauber’s scenario, we are one-hundred-plus years into the future. The backstory: Earth, having exhausted itself with a series of planet-confined “Worlder” wars, next turned its belligerent attentions to the scores of peaceful orbital habitats, and launched the Spacer War. That conflict ended when Cesar Vaquero, grizzled and wily warrior and our hero, nuked Mexico from above. After futzing around for several years afterward, an ailing and aged Cesar gets a hankering to return home to the orbital called Ithaca, and the cattle ranch run by wife Penelope and Trevor, their son. There he passes unrecognized, going under the name of “Jonas Ulises.” The daily rituals of Ithaca, detailed with clever futuristic naturalism, sustain the delicious and duplicitous tensions of his return. Then a deadly crisis arises, as you might suspect, in which Cesar gets to shine.

Stauber makes a wise decision in her telling. She realizes that all the real human drama comes when Cesar/Ulises returns home, and must confront his wife and son and all his bad life choices, and learn how to move forward as a person, with his sins and transgressions acknowledged and repented. But, on the other hand, she does not want to throw away all the glorious hell-raising incidents of his wandering years (such as the time, for instance, that Cesar and crew ventured onto the *Poppy*, an orbital dedicated to synthetic lotos eating). So the realtime narrative is set on Ithaca, while the pre-return adventures are told as flashbacks, either by Cesar himself or other relevant witnesses in a variety of charming voices. It’s an innovation that grants the best of both milieus.

Stauber’s prose is pure delight throughout. She establishes a rollicking folktale/tall tale/bardic tone right from the get-go,

conjuring up a blend of Lafferty and Heinlein (“The Green Hills of Earth” in particular), with maybe some of Laumer & Brown (*Earthblood*) as well. Actually, what the book most reminds me of is the Coen Brothers film, *O Brother, Where Art Thou?* George Clooney as Cesar? Yes! Humor and pathos share equal billing. She never belabors her parallels with Homer, and feels free to diverge when her sense of good dramaturgy demands divergence. And all the myths are cloaked in very apt speculative raiments.

Thus Stauber’s fine second novel blends the ancient and the postmodern, showing that certain human archetypes will be with us forever, affording us very pleasurable lessons and joys in new space-going dress.

### **The Inhabiter of Souls and Sanity-defying Schemes**

You know how singer-songwriter Randy Newman often dons the lyrical guise of weirdos and oddballs when he sings, inhabiting those personae of his imagination so fully that naïve listeners often mistake his songs for flat-out declarations of Newman’s own beliefs? (Castigating “Short People”? Who does he think he is!) Well, Kit Reed and her fictions remind me very much of Newman and his songs. She invents hypnotically eccentric and off-the-wall characters, often placing them in utterly bizarre, Kafkaesque situations, then dons each protagonist like a second skin for the duration of the story. Next time around, it’s a totally different mask. But somehow, by gracing these grotesques with her sympathy and intelligence, she affirms their undeniable, existential commonality with the “normals” (are there really any such creatures? Reed seems to slyly inquire) and with her readers.

And also, paradoxically, just as with Newman, the essential gestalt of Reed emerges from the oft-times savage and satirical impersonations. You feel you know her and her “preoccupations,” as she labels them, intimately and clearly. Another writer who could do this was



Tom Disch, although Disch's impersonations were always more cool and distanced and skeptical and cruel, the renditions of a lonely thespian ultimately aloof from humanity. Reed, however, is always right down there, reveling in the muck and mire of shared human existence.

Her career-spanning new collection, *The Story Until Now* (Wesleyan University Press, hardcover, \$35.00, 464 pages, ISBN 978-0-8195-7349-0), illustrates Reed's talents in a big impressive package. This is a book you want to shelve right next to similar compilations by Ellison and Ballard, for instance.

The arrangement of classic stories here—six that have never before been reprinted show up as well—is not at all chronological, but instead usefully follows the roadmap of authorial “obsessions.” For instance, the first three stories—“Denny,” “The Attack of the Giant Baby,” and “What Wolves Know”—all revolve around child-parent relations, while another trio—“Automatic Tiger,” “Piggy” and “Song of the Black Dog”—

concern mythic creatures and their role in human lives. Bopping from one of these thematic sets to another is like journeying through an archipelago of dreams, to borrow Christopher Priest's notion.

Besides being able to perfectly evoke modern speech and environments, Reed also exhibits a Shirley-Jacksonish love of the Gothic—“Family Bed”—and a flair for surrealism. Consider just the opening sentence to “Perpetua”: “We are happy to be traveling together in the alligator.” Her early stories, while neatly and cleverly constructed, might very well be surpassed by the looser, wilder, crazier stuff of recent years. That's the kind of career progression all too seldom seen, as writers tend instead to get fossilized and timid.

Finally, for grace notes, Gary Wolfe supplies a cogent introductory essay, while husband Joe Reed's eye-catching painting of a tiger looms boldly on the cover, making for one fine, must-have package. ○



# SF CONVENTIONAL CALENDAR

Things slow down in the summer, till WorldCon. While you wait, though, check out DuckKon, SoonerCon, the Locus Awards, WesterCon, InConJunction, ReaderCon (I'm there), DiversiCon and When Words Collide. Plan now for social weekends with your favorite SF authors, editors, artists, and fellow fans. For an explanation of con(vention)s, a sample of SF folksongs, and info on fanzines and clubs, send me an SASE (self-addressed, stamped #10 [business] envelope) at 10 Hill #22-L, Newark NJ 07102. The hot line is (973) 242-5999. If a machine answers (with a list of the week's cons), leave a message and I'll call back on my nickel. When writing cons, send an SASE. For free listings, tell me of your con five months out. Look for me at cons behind the Filthy Pierre badge, playing a musical keyboard. —Erwin S. Strauss

## JUNE 2013

21-23—ConTerpoint. For info, write: c/o 5911 Veranda Dr., Springfield 22152 22152. Or phone: (973) 242-5999 (10 am to 10 P.M., not collect). (Web) [www.conterpoint.org](http://www.conterpoint.org). (E-mail) [sbrinich@gmail.com](mailto:sbrinich@gmail.com). Con will be held in: Gaithersburg MD (near DC) (if city omitted, same as in address) at the Hilton. Guests will include: Stone Dragons, A. Ross, L. Allcock, D. & J. Baker. SF/fantasy folksinging.

28-30—SoonerCon. (405) 310-9255. [www.soonercon.com](http://www.soonercon.com). Reed Conference Center, Midwest City OK. C. J. Cherryh, Tim Powers, more.

28-30—DuckKon. [www.duckkon.org](http://www.duckkon.org). Westin Chicago North Shore, Wheeling IL. Golden Duck awards.

28-30—ConTemporal. [www.contemporal.org](http://www.contemporal.org). North Raleigh Hilton, Raleigh NC. Pirate/western/SF mashup, looks like.

28-30—BaCon. [www.ba-con.org](http://www.ba-con.org). Columbus OH. "Weekend-long Convention Celebrating Geeks, Games, Tech and . . . BACON!!!"

28-30—Locus Awards. [www.locusmag.com](http://www.locusmag.com). Best Western Executive, Seattle WA. Connie Willis. Locus Magazine's annual awards event.

28-30—New York Faerie Festival. [www.nyfaeriefest.com](http://www.nyfaeriefest.com). Ouaquaga NY. Renaissance-faire-type event, featuring the fey folk.

## JULY 2013

4-6—GrangeCon. [www.grangecon.org](http://www.grangecon.org). Eden Resort, Lancaster PA. Low-key SF/fantasy relax-a-con; "hang out, talk shop, and eat."

4-7—WesterCon. [www.westercon66.org](http://www.westercon66.org). Sacramento CA. Griffith, Eskridge. The big annual Western SF/fantasy convention, 66th edition.

4-7—ConVergence, 1437 Marshall Ave. #203, St. Paul MN 55104. (612) 234-2845. [www.convergence-con.org](http://www.convergence-con.org). Bloomington (Mpls.) MN.

5-7—InConJunction, Box 68514, Indianapolis IN 46268. [www.inconjunction.org](http://www.inconjunction.org). Marriott East. Cherie Priest. "Strange New World."

5-7—North American Discworld Con. [www.nadwcon.org](http://www.nadwcon.org). Marriott Waterfront, Baltimore MD. "The Turtle Moved!"

5-7—Finland National SF/Fantasy Convention. [www.2013.finncon.org](http://www.2013.finncon.org). Helsinki, Finland. P. Watts, A. de Bodard, J. P. Mäkelä, S. Ekman.

11-14—ReaderCon, Box 65, Watertown MA 02471. [www.readercon.org](http://www.readercon.org). Marriott, Burlington MA. McHugh, McKillip. Written SF/fantasy.

23-25—PulpFest. [www.pulpfest.com](http://www.pulpfest.com). Hyatt, Columbus OH. Celebrating Doc Savage, pulp heroes of 1933, 80th anniversary of Fu Manchu.

## AUGUST 2013

2-4—DiversiCon, Box 8036, Minneapolis MN 55408. [www.diversicon.org](http://www.diversicon.org). Best Western Bandana Square, St. Paul MN. Jack McDevitt.

2-4—When Words Collide, 3314 38th SW, Calgary AB T3E 3G5. [www.whenwordscollide.org](http://www.whenwordscollide.org). Genre writing: SF, mysteries, romance, etc.

2-4—Shore Leave, Box 6809, Towson MD 21285. [www.shore-leave.com](http://www.shore-leave.com). Hunt Valley Inn, Hunt Valley MD. Guests TBA. Trek & media SF.

2-4—Harbour ConFusion. [www.harbourconfusion.com](http://www.harbourconfusion.com). Saint John NB. SF, fantasy, horror, steampunk, anime.

2-4—Deadly Ink, 3308 Franklin Lane, Rockaway NJ 07866. [www.deadlyink.com](http://www.deadlyink.com). New Brunswick NJ. For fans of mystery fiction.

16-18—SanJapan. [www.san-japan.org](http://www.san-japan.org). Convention Center, San Antonio TX. Arin Hanson, Martin Bilany, Richie Branson. Anime.

23-25—BuboniCon, Box 37257, Albuquerque NM 87116. (505) 459-8734. [www.bubonicon.com](http://www.bubonicon.com). T. Powers, B. Weeks, D. Rowland, A. Beck.

23-25—NecronomiCon. [www.necronomicon-providence.com](http://www.necronomicon-providence.com). Biltmore, Providence RI. S. T. Joshi and others. Celebrating H. P. Lovecraft.

29-Sep. 2—Lone Star Con 3, Box 27277, Austin TX 78755. [www.lonestarcon3.org](http://www.lonestarcon3.org). San Antonio TX. The World SF Convention. \$160+.

## SEPTEMBER 2013

11-15—IlluXCon. [www.illuxcon.com](http://www.illuxcon.com). Allentown PA. Note new city. For fans and practitioners of the art of illustration, in all its forms.

13-15—SF: the Interdisciplinary Genre. McMaster Univ., Hamilton ON. Robert J. Sawyer, whose papers he's donating. Academic.

13-15—NautiCon. [www.nauticons.com](http://www.nauticons.com). Provincetown Inn, Provincetown MA. Age 21 & up only. Members only on hotel premises.

14-15—FantaCon. [www.fantacon.com](http://www.fantacon.com). albany.org. Marriott, Albany NY. No more information on this one at press.

19-22—BoucherCon. [www.bouchercon.com](http://www.bouchercon.com). Albany NY. Guests TBA. The world convention for fans of mystery fiction.

## AUGUST 2014

14-18—LonCon 3. [www.loncon3.org](http://www.loncon3.org). Docklands, London UK. The WorldCon. £105/A,C,US\$175.







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